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# Annual Archæological Report 1903

BEING PART OF  
Appendix to the  
Report of The Minister of Education  
Ontario

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*T O R O N T O .*



# CONTENTS.

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	Page.
Presentation .....	6
Accessions to the Museum .....	7
Who Made the Effigy Stone Pipes ? .....	27
The Working of Native Copper .....	36
Reply to "Who Made the Effigy Pipes ?" Jos. D. McGuire .....	43
Notes on Copper Workers. Jos. D. McGuire .....	46
Unfinished Stone Pipes .....	48
Finished Stone Pipes .....	52
Clay Pipes .....	56
Stone Axes .....	57
Slate Knives .....	59
A Slate Pendant .....	62
Stone Gouges .....	62
Pebble Gorget .....	65
How the Indian Mended Stone .....	66
Stone Files or Steel Files ? .....	67
Some Mechanical Methods .....	69
Bone and Horn .....	78
Who Made the Bone Combs ? .....	80
Reply to "Who Made the Bone Combs ?" Rev. Dr. W. M. Beauchamp ..	85
A Shell Necklace .....	87
A Few Copper Tools .....	88
A Brass Smoking Pipe .....	91
Two Bored Skulls .....	91
Burial Place in Onondaga Township .....	92
A Good Piece of Work in Stone .....	95
British Columbia Mummies .....	96
The Standing Rock. Fred. Birch .....	98
Indian Village Sites in North Victoria. Geo. E. Laidlaw .....	101
Village Sites in North Orillia .....	102
Indian Village Sites in North and South Orillia. A. F. Hunter, M.A. ....	105
Iroquois in the Northwest Territories .....	125
The Killing of Moostoos the Wehtigoo .....	126
The Caribs of Guiana and the West Indies. Rev. Dr. W. R. Harris .....	138
The late Robert T. Anderson .....	146



## PRESENTATION.

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HON. RICHARD HARCOURT, LL.D., K.C.,

*Minister of Education.*

SIR,—In presenting to you the accompanying report on the archæology of the Province, it is pleasing to be able to state that the year has been quite a satisfactory one in so far as the museum is concerned.

Office work demands most of the curator's time, partly on account of correspondence, partly because the large number of specimens (now nearly 27,000) on exhibition, require a corresponding amount of care; but to a very great extent also for the reason that his appointment as superintendent of the Provincial Museum, as a whole, makes it necessary to devote a good deal of attention to general oversight.

It is hoped that during 1904 something may be accomplished in the way of field work, in response to requests that have reached the museum from so many quarters.

The increase in the quantity of material demands more case-room, and the curator's duties cannot be accomplished in anything like a proper way without better office and workshop accommodation.

I have the honor to be

Yours respectfully,

DAVID BOYLE.

Education Department of Ontario,

Toronto, December 23rd, 1903.





## ACCESSIONS TO THE MUSEUM.

- 25,001 Wooden extension candlestick. Candlesticks of this kind were used by shoemakers and wagonmakers over fifty years ago. W. J. Wintenberg.
- 25,002-004 Iron lamps used in Oxford and Waterloo counties, in the early part of last century. W. J. Wintenberg.
- 25,005 Sheet metal lamp used by one of the gold workers, in the African village at the Pan-American Exposition, Buffalo, U.S.A. W. J. Wintenberg.

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25,006-20 from Dr. R. W. Large.

- 25,006 Wooden spoon or ladle. Tay township, Simcoe co.
- 25,007-11 Bone and horn awls. Tay township, Simcoe co.
- 25,012 Fragment of a small clay vessel. Tay township, Simcoe co.
- 25,013 Stem of a soapstone pipe. Tay township, Simcoe co.
- 25,014 Worked bone. Tay township, Simcoe co.
- 25,015 Part of a bone harpoon point. Tay township, Simcoe co.
- 25,016-17 Bone awls. Tiny township, Simcoe co.
- 25,018 Brass ring. Tiny township, Simcoe co.
- 25,019 Iron arrowhead. Tiny township, Simcoe co.
- 25,020 Iron pipe. Tiny township, Simcoe co.

- 
- 25,021-3 Old flint lock ; double barbed muskrat spear of iron, seventeen inches long (for using through the ice); and a rapier blade, two feet long exclusive of the handle portion. Found on the banks of the Talbot river, at Bolsover, per G. E. Laidlaw, from Jas. McGirr.

- 25,024 Wooden beater, used in the manufacture of tapa cloth from the inner bark of the mulberry, South Sea Island. David Boyle.

- 25,025 Ngae Yen. Two-stringed musical instrument, Canton, China. (Purchase.)

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25,026-44 presented by Howard R. Kelcy.

- 25,026-29 Pottery fragments, lot 7, con. 10, Innisfil tp.
- 25,030-32 Fragments of pipes, lot 7, con. 10, Innisfil tp.
- 25,033-36 Bone awls, lot 7, con. 10, Innisfil tp.
- 25,037-38 Bone beads, lot 7, con. 10, Innisfil tp.
- 25,039 Shell of unio, lot 7, con. 10, Innisfil tp.
- 25,040-43 Rubbing stones, lot 7, con. 10, Innisfil tp.
- 25,044 Broken celt, lot 7, con. 10, Innisfil tp.

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25,045-51 presented by F. W. Waugh.

- 25,045 Bone needles, Brant county.
- 25,046 Bone specimen, Brant county
- 25,047 Portion of the carapace of *Chrysemys picta*, Indian village site, Brantford tp., Brant co.
- 25,048-51 Various animal bones, Indian village site, Brantford tp., Brant co.

- 25,052 Bone apple-scoop used in Yorkshire, England, many years ago. T. Ware, per W. J. Wintemberg.
- 25,053. Bone harpoon. W. J. Wintemberg.
- 
- 25,054. Very fine banner stone, North Easthope tp., Perth co. Mr. W. J. Fraser, Toronto.
- 25,055 Bone in preparation for making fish hooks; from a mound. W. C. Mills, Curator of the Ohio Archæological and Historical Society's Museum, Columbus, Ohio.
- 25,056 Piece of human frontal bone from an earthwork, Malahide tp. R. T. Anderson, Aylmer, Ont.
- 25,057 Gorget (subsequently used for whetting or smoothing), lot 8, con. 10, Blenheim tp. G. Campbell, per W. J. Wintemberg.
- 25,058 Huronian slate object, Blanchard tp. Jno. McEwen, per W. Matheson.
- 

From 25,059-438 from J. P. Hunt.

- 25,059 Grooved axe, T. Forbner, Delaware tp.
- 25,060 Grooved axe, West London, Ont. Mr. Lawrence.
- 25,061 Grooved axe, lot 21, con. 7, E. Nissouri tp. D. Wilkie.
- 25,062 Grooved axe, lot 6, con. 9, Enniskillen tp. W. A. Brock.
- 25,063 Grooved axe, Grovesend, Elgin Co., Ont. C. A. Stalter.
- 25,064 Grooved axe, Michigan. J. B. Watson.
- 25,065 Grooved axe, procured from Indians about 1840, by Mr. Holman, of London, Ont.
- 25,066 Gorget, lot 8, con. 3, London tp. Miss Webster.
- 25,067-70 Gorgets. On banks of Otter Creek near Tilsonburg. C. Wilcox.
- 25,071 Gorget, lot 31, con. 1, Westminster tp. J. Dale.
- 25,072 Gorget, con. 11, East Nissouri tp. J. Bolton.
- 25,073 Gorget, con. 9, East Nissouri tp. R. Adams.
- 25,074 Gorget, con. 7, East Nissouri tp. J. Newman.
- 25,075 Gorget, con. 9, East Nissouri tp. Jas. Speck.
- 25,076 Gorget, con. 9, East Nissouri tp. R. Adams.
- 25,077 Gorget, Grovesend, Elgin Co., per M. Griffin.
- 25,078 Gorget, lot 25, con. 2, London tp. H. Prince.
- 25,079 Unfinished gorget, Grovesend, Elgin Co. A. Marr.
- 25,080 Unfinished gorget, Thomas farm, Lambeth, Ont.
- 25,081 Unfinished gorget, lot 31, con. 7, E. Nissouri tp. F. Hunt.
- 25,082 Gorget, Blanchard tp. Mr. Pickard.
- 25,083 Catlinite pipe, Dakota, U.S.A. J. Brown.
- 25,084 Clay pipe bowl, Nixon farm, Pond Mills, Westminster tp.
- 25,085 Stone pipe head North West Territories. Mr. McIntosh.
- 25,086 Stone pipe bowl, ploughed up on bank of creek near St. Mary's, Blanchard tp. Mrs. Constable.
- 25,087 Fragment of ornamented pipe-stem, Westminster, Ont. Mr. Dale.
- 25,088-90 Clay pipes, McArthur farm, Westminster tp., Middlesex county.
- 25,093 Unfinished limestone pipe, Middlesex county.



- 25,094-5 Clay pipe bowl, McNeedy farm, Orwell, Elgin county.
- 25,096 Stone pipe bowl, given to British officer stationed at London, Can., in 1856, by an Indian. Mr. Screaton.
- 25,097 Catlinite pipe head, N.W.Territory. E. Wilson, Tilsonburg.
- 25,098 Bird effigy pipe, ploughed up at Lion's Head, Georgian Bay, Mr. Roberts.
- 25,099 Clay pipe bowl, Thomas farm, Lambeth, Middlesex county, Ont.
- 25,100 Clay pipe bowl, Edwards' farm, Komoka, Middlesex county.
- 25,101 Fragment of a decorated pipe bowl, Middlesex county.
- 25,102 Chisel, Aylmer, Elgin county.
- 25,103 Chisel, Mt. Bridges, Ont. R. Arnold.
- 25,104 Syenite adze, Grovesend, Elgin county. Mr. Griffin.
- 25,105 Gouge. Thomas farm, Lambeth, Middlesex county, Ont.
- 25,106 Hematite celt, Colorado. Mr. Atwater.
- 25,107 Large heavy adze, Langford farm, London tp. Middlesex co.
- 25,108 Limestone celt, in process of manufacture. Langford farm, London tp.
- 25,109 Unfinished celt, Delaware, Westminster tp. R. Gibson.
- 25,110 Celt, Delaware, Westminster tp. R. Gibson.
- 25,111 Celt, made from waterworn pebble, Grovesend, Elgin county. W. Smith.
- 25,112 Celt, in process of manufacture, Grovesend, Elgin county. A. Marr.
- 25,113 Celt, Middlesex county.
- 25,114-5 Hammer stones, E. Nissouri tp. J. Hogarth.
- 25,116 Hammer stone, London tp. J. Corsant.
- 25,117-18 Hammer stone, Barter farm, London tp., Middlesex co.
- 25,119 Hammer stone, Thomas' farm, Lambeth, Ont.
- 25,120 Half of a pick-like banner stone, Ontario county. W. Davis.
- 25,121 Huronian slate banner stone, Westminster tp. Mr. Dale.
- 25,122 Broken "butterfly" banner stone, Walker farm, E. Nissouri.
- 25,123 Banner stone, Grovesend, Elgin county. R. Chute.
- 25,124 "Butterfly" banner stone, Kettle Point, Ont. Dr. McArthur.
- 25,126 Perforated disc, Grovesend, Elgin. Jas. Chute.
- 25,128 Bird amulet, London. Mr. J. Tune, London (city).
- 25,129 Bird amulet, London, con. 5, Westminster tp. Jas. Anderson.
- 25,130 Bird amulet, Scanlon farm, East London. Mr. Scanlon.
- 25,131 Perforated ball-like ceremonial stone, Gallagher farm, 9th con. E. Nissouri tp.
- 25,132 Stone tube, near Hyde Park, London tp. Mr. Mackleborough.
- 25,133 Stone tube, London, Ont. Mr. J. Tune.
- 25,134 Copper bead, dug up on farm of Mr. Pascoe by H. Pascoe, Ontario county.
- 25,135 Copper chisel, found by Capt. Barr on his farm, Pt. Bruce, Elgin county.
- 25,136 Copper spear, sharp at both ends, taken from a mound near Norwich, by Warren Haley.
- 25,137 Curved copper knife, taken from near Norwich, Oxford co. W. Haley.
- 25,138 Copper chisel, London. J. Tune.

- 25,139 Long stone pestle, Pt. Burwell. Wm. Weaver.  
 25,140 Unfinished stone tube or pipe, Little York. Mr. Cook.  
 25,141 Grooved maul or pestle, Kettle Point. Dr. McArthur.  
 25,142 Stone spade or hoe, near Otter Creek, Tilsonburg. C. Wilcox.  
 25,143 Argillite spear head, near Otter Creek, Tilsonburg. C. Wilcox.  
 25,144-5 Large unnotched spear head, Grovesend, Elgin county. J. Marr.  
 25,146-7 Chert drills, Hyde Park, London tp. Mr. Mackleborough.  
 25,148 Gouge, Middlesex county.  
 25,149 Small slate pendant, Middlesex county.  
 25,150 Rubbing stone, Middlesex county.  
 25,151 Worked stone, Middlesex county.  
 25,152 Half of ceremonial stone, Middlesex county.  
 25,153 Huronian slate disc, Middlesex county.  
 25,154 Unfinished stone pipe, Middlesex county. This specimen came without any data as to locality. It is of Huronian slate, and may not have been intended for a pipe.  
 25,155 Long bone awl, found with copper head (25,134), in a mound in Ontario county. H. Pascoe.  
 25,156-206 Bone awls from various places in Western Ontario, Hyde Park, London Tp.  
 25,207-10 Horn Pins, Middlesex county.  
 25,211 Antler worked, Middlesex county, London tp.  
 25,212 Canine tooth of bear, Middlesex county.  
 25,213 Horn arrow tip, Middlesex county.  
 25,214 Horn implement, Middlesex county.  
 25,215 Bone bead, Middlesex county.  
 25,216 Bone implement, Mackleborough farm, Hyde Park, London tp. W. Wade.  
 25,217 Bone or horn implement, Middlesex county.  
 25,218 Shell of *unio undulatus* with umbo ground down until a hole appeared. Middlesex county.  
 25,219 Adze, Bogue farm, Westminster tp., Middlesex county.  
 25,220 Adze, Lot 32, con. 7, East Nissouri tp. J. Wakem.  
 25,221 Adze, Westminster tp. J. Anderson.  
 25,222 Large leaf shaped chert implement. Locality not known.  
 25,223-26 Leaf shaped chert implements, Middlesex county.  
 25,227-45 Leaf shaped chert knives, Middlesex county.  
 25,246-51 Spear heads, Middlesex county.  
 25,252-56 Arrowheads, shouldered but not barbed, Middlesex county.  
 25,257-59 Rotary (?) arrowheads, Middlesex county.  
 25,260 Celt or adze, Grovesend, Elgin County.  
 25,261 Celt or adze, Lambeth township.  
 25,262 Celt or adze, Bogue farm, Westminster township.  
 25,263 Celt or adze, Komoka, Ont.  
 25,264 Celt or adze, Little York, Ont., just east of Toronto.  
 25,265 Celt or adze, Little York, Ont., just east of Toronto.  
 25,266 Celt or adze, Delaware, Westminster tp.  
 25,267 Celt or adze, Grovesend, Elgin county.  
 25,268 Celt or adze, Manitoulin Island. Mr. Rumball.  
 25,269 Celt or adze, Grovesend, Elgin county.

- 25,270 Celt or adze, Grovesend, Elgin county.  
 25,271 Celt or adze, near asylum for insane, London, Ont.  
 25,272 Celt or adze, Delaware, Westminster tp.  
 25,273 Celt or adze, near asylum for insane, London, Ont.  
 25,274 Celt or adze, Grovesend, Elgin county.  
 25,275 Celt or adze, Glanworth, Westminster tp.  
 25,276 Celt or adze, Grovesend, Elgin county. C. Stalter.  
 25,277 Celt or adze, collected by Smithsonian Institute. Washington, D.C.  
 25,278 Celt or adze, Lot 32, con. 7, E. Nissouri tp. (Atwater). J Wakem.  
 25,279 Celt or adze, Grovesend, Elgin county. Mr. Piggot.  
 25,280 Celt or adze, Grovesend, Elgin county. Mr. Tedford.  
 25,281 Celt or adze, Thomas farm, Westminster tp.  
 25,282 Celt or adze, White Oak. Frank Shore.  
 25,283 Celt or adze, Mt. Bridges. R. Arnold.  
 25,284 Celt or adze, Westminster tp. Mr. Horton.  
 25,285 Celt or adze, Grovesend, Elgin County. W Smith.  
 25,286 Celt or adze, Thomas farm, Lambeth tp.  
 25,287 Celt or adze, Delaware, Westminster tp. R. Gibson.  
 25,288 Celt or adze, Glencoe, Ont Dr. Weeks.  
 25,289 Celt or adze, Grovesend, Elgin county. Mr. Tedford.  
 25,290 Celt or adze, Thomas farm, Lambeth tp.  
 25,291 Celt or adze, Grovesend, Elgin county.  
 25,292 Celt or adze, Middlesex county.  
 25,293 Celt or adze, E. Nissouri tp. F. McMaster.  
 25,294 Celt or adze, Manitoulin Island. Mr. Rumball.  
 25,295 Celt or adze, Grovesend, Elgin County. Jas. Chute.  
 25,296 Celt or adze, Glanworth, Westminster tp. J. Jones.  
 25,297 Celt or adze, Middlesex county.  
 25,298 Celt or adze, Tilsonburg, Ont.  
 25,299 Celt or adze, Otter Creek. C. W. Wilcox.  
 25,300 Celt or adze, Westminster tp. J. Anderson.  
 25,301 Celt or adze, Grovesend, Elgin county. Mr. Farra.  
 25,302 Celt or adze, Thomas farm, Lambeth tp.  
 25,303 Celt or adze, Thomas farm, Westminster tp.  
 25,304 Celt or adze, Bogue farm, Westminster tp.  
 25,306 Celt or adze, Grovesend, Elgin county. C. Stalter.  
 25,307 Celt or adze, Grovesend, Elgin county. Mr. Wagan.  
 25,308 Celt or adze, Lot 32, con. 7, E Nissouri tp. W. Greason.  
 25,309-13 Celt or adze. Middlesex county.  
 25,314 Chisel, Glendale, Westminster tp. Mr. Dale.  
 25,315 Chisel, Grovesend, Elgin county. Jos. Marr.  
 25,316 Chisel, London tp., per Mr. Markleborough.  
 25,317 Celt, Middlesex county.  
 25,318-22 Sinkers, Smith farm, Grovesend, Elgin county.  
 25,323-25 Sinkers, James Chute farm, near Pt. Burwell.  
 25,325-28 Sinkers, Tedford farm, Grovesend, Elgin county.  
 25,329-36 Sinkers, Middlesex county.  
 25,337-38 Fragments of gorgets. Thomas farm, Lambeth tp.  
 25,339 Fragment of gorget. Whetler farm, near London, Ont.  
 25,340 Fragment of gorget, near Tilsonburg, Ont. C. Wilcox.



- 25,341-42 Fragments of gorgets, Tilsonburg, Ont. E. Wilson.  
 25,343 Fragment of banner stone, Aylmer, Ont. C. Stalter.  
 25,344 Fragment of banner stone, Glencoe, Ont. Dr. Weeks.  
 25,345 Fragment of bar-amulet, Middlesex county, Ont.  
 25,346-54 Fragments of pipes, Thomas farm, Lambeth tp.  
 25,355 Fragment of pipe bowl, Grovesend, Elgin county, Ont., J. Telford.  
 25,356 Fragment of pipe bowl, McReady farm, Orwell, Yarmouth tp.  
 25,357 Pipe stem, Nixon farm, Pond Mills, Ont.  
 25,358 Pipe stem, McArthur farm, Westminster tp.  
 25,359 Pipe fragment, McArthur farm, Westminster tp.  
 25,360 Pipe fragment, McArthur farm, Westminster tp.  
 25,361-62 Fragments of pipe bowls, McArthur farm, Westminster tp.  
 25,363-64 Fragments of pipe bowls, McReady farm, Orwell, Yarmouth tp.  
 25,365-66 Fragments of pipe bowls, Lot 14, Westminster tp, T. Burgers  
 25,367-68 Fragments of pipe bowls, near creek, Pottersburg.  
 25,369-71 Fragments of pipe bowls and stem, Middlesex county.  
 25,372 Fragment of limestone pipe, Scanlon farm, London tp.  
 25,373-76 Bone and deer horn awls and pincers, Middlesex county.  
 25,377-83 Worked unio shells, Middlesex county.  
 25,384-85 Worked pieces of slate, Middlesex county.  
 25,386 Huronian slate tube, Glencoe, Ont. Dr. Weeks.  
 25,387 Part of limestone pipe bowl, bearing rude pictographs, Mr. Shaw Wood's farm at the Old Fort.  
 25,388-91 Peculiar forms of chert scrapers, Middlesex county.  
 25,392-415 Arrowheads of various types and materials, Middlesex county.  
 25,422 Chert knife, Middlesex county.  
 25,423 Chipped chert object retaining original outer surface of water-worn pebble on lower edge, Middlesex county.  
 25,424 Peculiarly shaped chert implement, may have been an arrow shaft scraper, Middlesex county.  
 25,425 Arrowhead, broad leaf-shaped blade with small stem, Middlesex county.  
 25,426-34 Pottery fragments, Middlesex and Elgin counties.  
 25,435 Adze, E. Nisour. F. Hunt.  
 25,436 Celt, also used as a cord smoother, (?) Tilsonburg. C. Wilcox.  
 25,437 Celt, with pit on upper and lower surface, showing that it had served as a hammer stone, Grovesend, Elgin county.  
 25,438 Iron tomahawk. C. Wilson, Tilsonburg.

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From 25,439-26,085. From Walter M. Dick, Brantford.

- 25,439 Clay pot. Only relic found in grave in which there were nine skeletons. The grave was four feet deep and was covered by a pine stump eighteen inches in diameter. Walker farm, lot 10, con. 3, Onondaga township. In former reports owing to misinformation, the Walker and Sealey, (or Sealy) farms, were stated to be in Brantford tp. The farms are near the line between the two townships.

- 25,440 Bead necklace, grave, Walker farm, Onondaga tp.  
 25,441-45 Necklaces, (copper beads) birch bark, and coarse cloth, Walker farm.  
 25,446 Copper vessel, Walker farm, grave.  
 25,447 Stone chipping-block, Sealey farm, lot 9, 1st range south of Hamilton road, Brantford tp.  
 25,448 Small mealing-stone or rubbing-stone, E. W. Vanderlip farm.  
 25,449 Bone beads, (12 large) from Sealey, Purdy, Walker and Book farms, Brantford and Onondaga tps.  
 25,450 Arm-bones of young person, with copper bracelet, Teeple farm, Jerseyville, Ancaster tp.  
 25,451 Slender strip of bone, five inches long, pointed, (needle, ?) from grave five feet deep, lot 10, con. 3, Onondaga tp.  
 25,452 Stone axe, lot 9, 1st range, Hamilton road, S. Onondaga tp.  
 25,453 Iron tomahawk, grave, Walker farm, Onondaga tp.  
 25,454 Large shell, (*Busycon perversum*) Walker farm, Onondaga tp.  
 25,455 Large shell bead, from *Busycon perversum*, Walker farm.  
 25,456 String of small glass beads, Walker farm, Onondaga tp.  
 25,457 Clay pot, Walker farm. A beech root grew around the vessel.  
 25,458 Tortoise shell, grave, Walker farm, Onondaga tp.  
 25,459 Iron axe, grave, Walker farm, Onondaga tp.  
 25,460 Stone hammer, Sealey farm, Onondaga tp.  
 25,461 Small copper kettle, grave, Walker farm, Onondaga tp.  
 25,462 Shell beads, (20) graves, Walker farm, Onondaga tp.  
 25,463 Shell breastplate, Teeple farm, Jerseyville, Ancaster tp.  
 25,464 Knife, grave, Walker farm, Onondaga tp.  
 25,465 Copper kettle with contents, grave, Walker farm, Onondaga tp.  
 25,466 Shell of *Busycon perversum*, grave, Walker farm, Onondaga tp.  
 25,467 Arrow heads, Sealey farm, Onondaga tp.  
 25,468 Pipe stone beads, (2 native, 13 venetian glass, and 5 imitation of the native catlinite) grave, Walker farm, Onondaga tp.  
 25,469 Small breastplate, Walker farm, grave, Onondaga tp.  
 25,470 Breastplate of shell, grave, Walker farm, Onondaga tp.  
 25,471 Wooden plate, grave, Walker farm, Onondaga tp.  
 25,472 Fragments of pottery, Sealey, Purdy, Walker and Book farms.  
 25,473 Lead vessel, grave, Walker farm, Onondaga tp.  
 25,474 Bone bead, grave, Walker farm, Onondaga tp.  
 25,475 Portion of earthen vessel, Sealey farm, Onondaga tp.  
 25,476 Remains of other large clay vessels, Sealey farm, Onondaga tp.  
 25,477 Skull, grave, Sealey farm, Onondaga tp.  
 25,478 Copper vessel, grave, Walker farm, Onondaga tp.  
 25,479 Wooden spoon, grave, Walker farm, Onondaga tp.  
 25,480 Comb unfinished, Sealey farm, Onondaga tp.  
 25,481-4 Combs, graves. Walker farm, Onondaga tp.  
 25,485 Bone spoon, grave, Walker farm, Onondaga tp.  
 25,486 Grave, Walker farm, Onondaga tp.  
 25,487 Arrow points (45), grave, Walker farm, Onondaga tp.  
 25,489 Knife, grave, Walker farm, Onondaga tp.  
 25,490 Wampum discs united (14), grave, Walker farm, Onondaga tp.  
 25,491 Shell ornament, grave, Walker farm, Onondaga tp.

- 25,492 Paint, grave, Walker farm, Onondaga tp.
- 25,493 Spoon, grave, Walker farm, Onondaga tp.
- 25,494-8 Bone needles, Sealey farm, Onondaga tp.
- 25,499 Tally-bone, Sealey farm, Onondaga tp.
- 25,500 Bone awl, Sealey farm, Onondaga tp.
- 25,501 Polished elk tooth, Sealey farm, Onondaga tp.
- 25,502 Turtle shell, drilled, Sealey farm, Onondaga tp.
- 25,503 Deer-horn pipe, Sealey farm, Onondaga tp.
- 25,504 Bone ornament, Sealey farm, Onondaga tp.
- 25,505 Whistle (?) lot 11, 1st range, south of Hamilton and London rd.
- 25,506-7 Breastplates of shell, grave, Walker farm, Onondaga tp.
- 25,508 Colored European beads (74), Walker farm, Onondaga tp.
- 25,509 Wampum (23) purple discs, made from Venus mercenarie, Sealey farm, Onondaga tp.
- 25,510 Arrow straightener (deerhorn), Sealey farm, Onondaga tp.
- 25,511 Deer-horn, Sealey farm, Onondaga tp.
- 25,512 Deer-horn, Walker farm, Onondaga tp.
- 25,513-4 Spears, Sealey farm, Onondaga tp.
- 25,515 Gouge, Sealey farm, Cainsville, Brantford tp.
- 25,516 Stone axe, from farms adjoining Sealey farm, Onondaga tp.
- 25,517 Lower jaw bone, grave, Walker farm, Onondaga tp.
- 25,518 Shell ornament, Sealey farm, Onondaga tp.
- 25,520 Amulet, found in the fields in vicinity of Sealey farm, Onondaga tp.
- 25,521 Fish spear, Sealey farm, Onondaga tp.
- 25,522 Parched corn. Sealey farm, Onondaga tp.
- 25,523 Reducing stone Sealey farm, Onondaga tp.
- 25,524 Worked clay, Book farm, lot 50, Brantford tp.
- 25,525 Pipe bowl, Sealey farm, Onondaga tp.
- 25,526 Native cloth, grave, Walker farm, Onondaga tp.
- 25,527 Copper man, (sheet copper or brass) lot 11, 1st range, South Hamilton road.
- 25,528 Pipe head, Sealey farm, Onondaga tp.
- 25,529 Image of man's head, Sealey farm, Onondaga tp.
- 25,530 Image head, Sealey farm Onondaga tp.
- 25,531 Copper beads, Sealey farm, Onondaga tp.
- 25,532 Bone, marked, Purdy farm, lot 56, con. 3, Brantford tp.
- 25,533 Peculiar chisel, lot 56, con. 3, Brantford tp.
- 25,534-5 Pipe bowls, Sealey farm, Onondaga tp.
- 25,536 Breast plate, grave, Walker farm, Onondaga tp.
- 25,537 Grooved axe, lot 7, 1st range, south, Hamilton road
- 25,538 Iron bracelet, grave, Walker farm, Onondaga tp.
- 25,539-41 Bracelets, grave, Walker farm. The band bracelet is from Teeple farm, Jerseyville, Ancaster tp.
- 25,542 Deer horn pin, Sealey farm, Onondaga tp.
- 25,543 Copper kettle, grave, Walker farm. Onondaga tp.
- 25,544 Skull, grave, Walker farm, Onondaga tp.
- 25,545 Wampum, graves, Walker farm, Onondaga tp.
- 25,546 Tower pipe, grave, Walker farm, Onondaga tp.
- 25,547 Tower pipe, grave, Walker farm, Onondaga tp.
- 25,548 Copper pipe, grave, Walker farm, Onondaga tp.



- 25,549 Pipe bowl, grave, Walker farm, Onondaga tp.  
 25,550 Pipe, grave, Walker farm, Onondaga tp.  
 25,551 Stone pipe, grave, Walker farm, Onondaga tp.  
 25,552 Pipe, clay, grave, Walker farm, Onondaga tp.  
 25,553 Pipe, grave, Walker farm, Onondaga tp.  
 25,554 Stone pipe, grave, Walker farm, Onondaga tp.  
 25,555 Owl pipe, stone, grave, Walker farm, Onondaga tp.  
 25,556 Common pipe, Sealey farm, Onondaga tp.  
 25,557 Pipe bowls, Sealey farm, Onondaga tp.  
 25,558-66 Pipes, graves, Walker farm, Onondaga tp.  
 25,567 Stone pipe, Sealey farm, Onondaga tp.  
 25,568 Pipe, Teeple farm, grave, Jerseyville, Ancaster tp.  
 25,569 Pipe, grave, Teeple farm, Jerseyville, Ancaster tp.  
 25,570 Pipe, grave, Walker farm, Onondaga tp.  
 25,571 Copper pipe, (sheet) grave, Walker farm, Onondaga tp.  
 25,572-81 Pipes, grave, Walker farm, Onondaga tp.  
 25,582 Bone spoon, grave, Walker farm, Onondaga tp.  
 25,583 Slate ornament, bird amulet, Brantford tp.  
 25,584 Pipe, part broken, grave, Walker farm, lot 10, con. 3 Onondaga tp.  
 25,585 Pipe bowl, Sealey farm, Onondaga tp.  
 25,586 Rim of copper kettle, grave, Walker farm, Onondaga tp.  
 25,587 Specimens of lower jaw-bone, grave, Walker farm, Onondaga tp.  
 25,588 Shell, grave Sealey farm, Onondaga tp.  
 25,589 Pottery marker, Sealey farm, Onondaga tp.  
 25,590 Iron axe, grave, Walker farm, Onondaga tp.  
 25,591 Conch shell, grave, Walker farm, Onondaga tp.  
 25,592 Bone articles, Sealey farm, Onondaga tp.  
 25,593-4 Awls, Purdy farm, lot 56, con. 3, Brantford tp.  
 25,595 Slate ornament, found near Sealey farm, Onondaga tp.  
 25,596 Axe, iron, reduced, Sealey farm, Onondaga tp.  
 25,597 Bracelet, Teeple farm, Jerseyville, Ancaster tp.  
 25,598 Copper ring, grave, Walker farm, Onondaga tp.  
 25,599 Ring, Sealey farm, Onondaga tp.  
 25,600 Spoon, Sealey farm, Onondaga tp.  
 25,601 Spear, Sealey farm, Onondaga tp.  
 25,602 Pendant, grave, Walker farm, Onondaga tp.  
 25,603 Heart-shaped shell, Teeple farm, Jerseyville, Ancaster tp.  
 25,604 Rattle, grave, Walker farm, Onondaga tp.  
 25,605 Rude pipe head, Sealey farm, Onondaga tp.  
 25,606 Unfinished bead, Sealey farm, Onondaga tp. This was found in creek.  
 25,607 Animal skin, perhaps moose, with long hair attached. From a grave, Brant county.  
 25,608 Bone bead, Sealey farm, Onondaga tp.  
 25,609 Arrow point, grave, Walker farm, Onondaga tp.  
 25,610 Smooth stone, Sealey farm, Onondaga tp.  
 25,611 Perforated turtle-shell ornament, Sealey farm, Onondaga tp.  
 25,612-8 Some strings of wampum (shell beads), Walker farm, Onondaga tp.  
 25,619 Two strings of wampum, all discoidal, and of European make (in Albany or Schenectady, N.Y.)

- 25,620 Two discoidal beads, black and of material resembling anthracite coal, Walker farm, Onondaga tp.
- 25,621 String of slender Venetian glass beads, red, and from an inch and a quarter to two inches long. The beads are cylindrical, Walker farm, Onondaga tp.
- 25,622 String of eighteen Venetian glass beads, cylindrical and square in cross section, all red, Walker farm, Onondaga tp.
- 25,623 String of long cylindrical and small globular, blue, (Venetian) glass beads, Walker farm, Onondaga tp.
- 25,624 String of red, cylindrical, Venetian glass beads, Walker farm, Onondaga tp.
- 25,625 String of small red, blue and striped Venetian glass beads, Walker farm, Onondaga tp.
- 25,626 String of short cylindrical wampum, native make, Walker farm, Onondaga tp.
- 25,627-39 Strings of beads, mixed native and European, Walker farm, Onondaga tp.
- 25,640 Twenty-three large bone bead and tally bones.
- 25,641 Thirty-six large bone beads and tally bones.
- 25,642-47 Slate gorgets found in fields in vicinity of Sealey farm, Onondaga tp.
- 25,648-51 Long beads made from the columella of *Busycum perversum*. From a grave on Walker farm, Onondaga tp.
- 25,652-5 Long bone beads, grave, Walker farm, Onondaga tp.
- 25,656-60 Portions of wooden spoons, graves on Walker farm, Onondaga tp.
- 25,661 Wooden spoon, from grave on Walker farm, Onondaga tp.
- 25,662 Perforated piece of turtle shell, Sealey farm, Onondaga tp.
- 25,663-77 Horn pins, Sealey farm, Onondaga tp.
- 25,678 Phalangeal bone of deer, ground down on one side, Purdy farm, lot 56, con. 3, Brantford tp.
- 25,679-83 Shell ornaments, from graves on Walker farm, Onondaga tp.
- 25,684 Copper wire spiral ornament, Sealey farm, Onondaga tp.
- 25,685 Combined drill and scraper, grave on Walker farm, Onondaga tp.
- 25,686 Scraper, grave on Walker farm, Onondaga tp.
- 25,687-703 War points, grave on Walker farm, Onondaga tp.
- 25,704-713 Bone awls, Walker farm, Onondaga tp.
- 25,714 String of beads (12) made from vertebræ of a large fish, Sealey farm, Onondaga tp.
- 25,715 Beads still attached to original string, Walker farm, Onondaga tp.
- 25,716 Stone pipe, from a grave on Sealey farm, Onondaga tp.
- 25,717-23 Three chert arrowheads, piece of copper, iron knife, iron chisel and awl. All from a grave on Sealey farm, Onondaga tp.
- 25,724 Pipe bowl, Sealey farm, Onondaga tp.
- 25,725 Fragment of what appears to have been a pipe bowl, rectangular in cross section, Brant co.
- 25,726-50 Pottery fragments, various places in Brant co.
- 25,751 Portion of a large clay vessel, Sealey farm, Onondaga tp.
- 25,752-57 Worked deer horns, Brantford, Onondaga tp.



- 25,758-849 Flints, various places in Brant co.  
 25,850-60 Bone awls, etc., various places in Brant co.  
 25,861 Awl, made from the bill of a large bird, Brant co.  
 25,862-69 Fragments of plastron of a turtle, (sp.?) Brant co.  
 25,870-72 Pipe bowls, Sealey farm, Onondaga tp.  
 25,873-81 Pipe bowls, Brant co.  
 25,882 Worked pottery clay, Brook farm.  
 25,883-86 Bone needles, Brant co.  
 25,887-88 Iron awls, grave on Walker farm, Onondaga tp.  
 25,889-906 Celts and adzes, various places in Brant co.  
 25,907 Iron axe, Brant co., grave on Walker farm, Onondaga tp.  
 25,908 Iron axe, Brant co.  
 25,909 Shell of *Busycum perversum*, Walker farm, Onondaga tp.  
 25,910 Part of what appears to have been a crucible, which might have been used by the early French traders or missionaries.  
 25,911-12 Unio shells, Brant co., from graves.  
 25,913 Shell beads, (31) Sealey farm, Onondaga tp.  
 25,914-17 Four catlinite beads, native make, Sealey farm, Onondaga tp.  
 25,918 Eighty-five European glass beads, Sealey farm, Onondaga tp.  
 25,919-26,084 Wampum made by Europeans, Sealey farm, Onondaga tp.  
 26,085 Iron knife, Walker farm, Onondaga tp.
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- 26,086 Soapstone pipe, Lot 15, con. 5, Eldon tp. N. Victoria. Plowed up thirty-seven years ago by the late Mr. Torrie. G. E. Laidlaw.  
 26,087 Animal head probably from bowl of pipe, lot 23, con. 1, site 24, Brown's, Fenelon tp. G. E. Laidlaw.  
 26,088 Clay pipe, Lot 23, con. 1, site 24, Brown's, Fenelon tp. G. E. Laidlaw.  
 26,089 Bead made from clay pipe stem, lot 23, con. 1, site 24, Brown's, Fenelon township.  
 26,090 Animal foot-bone, gambling, lot 23. con. 1, site 24, Brown's, Fenelon tp.  
 26,091-9 Clay discs used for gambling purposes, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,100 Bone needles, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,102 Bone beads, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,107 Skull (Indian) Grave, township of Blanshard. W. J. Wintemberg.  
 26,108 Copper axe, found by Mr. Corey H. Redden, on lot 33, con. 2, township of Ernesttown, Lennox county. H. S. Davy, Odessa.  
 26,109 Bone bead. This article may be taken as an evidence that bone beads were dyed by the Indians, and that one method of so-doing was by winding fibrous material round the bone spirally before dipping the specimen into liquid coloring matter.  
 26,110 Arrowhead of argillite, Dominica, West Indies. Very Rev. Dean, W. R. Harris, D.D.  
 26,111 Skull of buffalo bull collected by Mr. Nash, Lethbridge Alberta. Presented by O. E. Windsor, Lethbridge.  
 26,112 Skull of buffalo cow, collected by Mr. Nash, Lethbridge. Presented by O. E. Windsor, Lethbridge, Alta.

From 26,113 to 26,170, presented by Fred Birch, Wodehouse.

- 26,113-26,137 Twenty-five flints from various places in Ontario.  
26,138 Stone adze, lot 9, con. 6, Euphrasia, Grey county.  
26,139 Stone adze, Maple, Vaughan tp., York county.  
26,140 Slate axe or chisel eight inches long, one and three-quarter inches wide, and three-quarters inch thick, Vandeleur, Grey county.  
26,141 Small axe (short and thick) Maple, Vaughan, York county.  
26,142 Small and well formed stone axe, Maple, Ont.  
26,143 Stone adze (roughly quadrangular in cross section), Maple, Vaughan tp.  
26,144 Roughly made stone axe or chisel, slight pits or hollows on one side.  
26,145 Stone axe, Valley of Beaver river, Euphrasia, Grey county.  
26,146 Stone axe, well formed, Chinguacousy, Peel county, Ont.  
26,147 Stone axe, found at Maple, Vaughan tp., county of York.  
26,148 Stone adze (very large) found on lot 16, con. 3, Euphrasia.  
26,149 Stone axe (broken) found at Maple, Vaughan tp., York county.  
26,150 Stone axe, found at Maple, Vaughan tp., York county, Ont.  
26,151 Slate gouge of Huronian slate (somewhat rare material for this purpose) and from a more northerly locality than any other tool of this kind in the museum. Clarksburg, Collingwood tp.  
26,152 Stone chisel, found at Chinguacousy, Peel county, Ont.  
26,153-4 Two small stone axes, Grey county.  
26,155 Bar amulet-degraded. This specimen (of Huronian slate) seems to have fallen into the hands of someone who has spoiled the end holes and begun to make others along the base. From near Coleraine, Vaughan tp., York county.  
26,156 Roughly chipped axe of Huronian slate. Only the edge ground or polished, lot 7, con. 7, Euphrasia, Grey county.  
26,157 Very thin slate cutting tool, probably a salmon knife. From Ladner's Landing, British Columbia.  
26,158 Spindle-whorl or perforated disc. From Whitchurch, York county.  
26,159 Fragment of pottery, Clarksburg, Collingwood tp., Grey county.  
26,160 Fragment of pottery, Clarksburg, Collingwood tp., Grey county.  
26,161 Wampum. From ossuary at Kleinburg, Vaughan tp. With these were found three hundred skulls, and four or five copper kettles.  
26,162 Clay pipe bowl. From Clarksburg, Collingwood tp., Grey county.  
26,163 Clay pipe bowl. From Clarksburg, Collingwood tp., Grey county.  
26,164 Very tiny clay pipe bowl, one half-inch long, and one-half inch wide. Probably a child's toy. From near the old fort, Midland, Ont.  
26,165 Clay pipe bowl, found near the old fort, Midland, Ont.  
26,166 Arrowhead (well shaped, but imperfect) lot 5, con. 6, Euphrasia, Grey county.

- 26,167-8 Two scrapers found at mouth of the Humber river, near Toronto.
- 26,169 Arrowhead of argillite. Ladner's Landing, British Columbia,
- 26,170 Arrowhead well shaped, lot 17, con. 7, Euphrasia, Grey county.
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- 26,171 Four stone, nine shell, two bone, and eight glass beads, Mitchell farm, Brant county, John Clark, Onondaga. Dr. A. Hamilton, Toronto.
- 26,172-9 Eight roughly chipped chert pieces, having an extremely paleolithic appearance. These are part of a cache found on the farm of Wm. Charlton, near Ilderton, London tp. Rev. C. Barltrop.
- 26,180 Half of a very fine gorget found on lot 7, con. 7, Euphrasia tp., Grey county. Fred Birch.
- 26,181 Unfinished slate gorget, north half lot 15, con. 12, Blenheim tp. A. Hall, per W. J. Wintemberg.
- 26,182-3 Pottery fragments bearing curved lines, near Otterville, Norwich tp. W. J. Wintemberg.
- 26,184 Pendant bearing incised pictographs. Lot 8, Beasley's New Survey, Waterloo county. H. Z. Smith, per W. J. Wintemberg.

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From 26,185-26,247 Presented by Fred Storry, Smithdale, Ont.

- 26,185-99 Fragments and cuttings of large shell, lot 12, con 7, Nottawasaga.
- 26,200 Eighteen shell beads, lot 12, con. 7. Nottawasaga.
- 26,201-2 Bear's teeth. Lot 12, con. 7, Nottawasaga.
- 26,203 Wolf's teeth. Lot 12, con. 7, Nottawasaga.
- 26,204 Left side upper tooth of beaver. Lot 12, con. 7, Nottawasaga.
- 26,205 Unfinished stone pipe head, of black limestone, in which are numerous small corals. Lot 12, con. 7, Nottawasaga.
- 26,206 Fragment of limestone pipe bowl, on which is carved a form, probably representing a lizard. Lot 12, con. 7, Nottawasaga.
- 26,207 Limestone pipe, somewhat imperfect. Lot 12, con. 7, Nottawasaga.
- 26,208 Stone pipe, carved to represent a human head and arms; the head projecting from the rim. The stem is broken and a new hole is bored in base for the insertion of another stem. Lot 12, con. 7, Nottawasaga.
- 26,209-12 Fragments of stone pipe stems. 26,209 is of soap-stone. 26,210 is of heavy spar. The other two are of limestone. Lot 12, con. 7, Nottawasaga.
- 26,213-18 Clay pipe bowls somewhat imperfect. 26,217 is formed to represent an upturned face, the open mouth of which forms the bowl. It resembles 6,864 in our collection from the same locality. Lot 12, con. 7, Nottawasaga.
- 26,219 Clay, human head from bowl of pipe. Lot 12, con. 7, Nottawasaga.
- 26,220 An unusually formed portion of what was probably a clay pipe stem. Lot 12, con. 7, Nottawasaga.

- 26,221-30 Clay pipe stems. Lot 12, con. 7, Nottawasaga.  
 26,231-39 Stone beads (red stone). Lot 12, con. 7, Nottawasaga.  
 26,240-41 Long stone beads. Lot 12, con. 7, Nottawasaga.  
 26,242 Fragment in dark red stone of what seems to have been an animal form. Lot 12, con. 7, Nottawasaga.  
 26,243 Stone disc, two inches in diameter, and three-sixteenths of an inch thick. Lot 12, con. 7, Nottawasaga.  
 26,244 Very elegantly and ingeniously formed bone harpoon, six inches long, with four barbs. Lot 12, con. 7, Nottawasaga.  
 26,245 Small red stone pendant; once much longer; somewhat turtle like. Lot 12, con. 7, Nottawasaga.  
 26,246 Twelve European glass beads from an Indian village site. Lot 12, con. 7, Nottawasaga.  
 26,247 Iron tomahawk in good condition, each side marked with three impressions of a stamp like 10.
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- 26,248 A small and somewhat modern looking black stone pipe. Kamloops, British Columbia. W. C. Perry, Winnipeg.  
 26,249 Isa-dunk'wa, used by Onondaga Indians to stretch muskrat hides. It is made of witch hazel (oo-eh-nah-kwen-ha'he). Some are made of arbor vitae or white cedar (oo-soo-ha'tah). The ends are fastened with a strip of the inner bark of the basswood (ho-ho'sa), and the hide was fastened at the bottom with a strip of the same material. W. J. Wintemberg.
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- 26,250 Short, crooked knife, iron blade and ivory handle. Herschel Island, Eskimo. Rev. I. O. Stringer.  
 26,251 Large bone spearhead, without blade, Eskimo, Herschel Island. Rev. I. O. Stringer.  
 26,252 Eskimo eye shade. Herschel Island. Rev. I. O. Stringer.  
 26,253 Lock fish-hook, used by Loucheux Indians of Fort McPherson. Rev. I. O. Stringer.  
 26,254 Eskimo throwing stick. Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,255 Undetermined. Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,256 Eskimo (Noonatagmiot tribe) spear, from Arctic coast, used in killing whales, seals, deer, moose, and other animals when swimming in rivers or lakes. Rev. I. O. Stringer.  
 26,257 Eskimo oomiak, or woman's boat model, Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,258 Eskimo kayak (model), Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.
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- 26,259 Purse of East Indian nurse (ayah). David Boyle.  
 26,260-65 Bone heads. British Columbia. Cary W. Hartman.
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26,266 to 26,345 presented by Dr. T. W. Beeman.

- 26,266 Very fine gouge, Baptiste Lake. J. Tysick, per Dr. T. W. Beeman.



- 26,267 Unfinished axe, Mississippi Lake. A. McCoy, per Dr. T. W. Beeman.
- 26,268 Gouge, lot 8. con. 1, Bathurst tp., Lanark co. G. Ritchie, per T. W. Beeman.
- 26,269 Quartzite arrowhead, Talon Lake, Lanark co. Geo. Hone, per Dr. T. W. Beeman.
- 26,270 Brownish colored chert knife, lot 14, con. 5, Lanark tp., Lanark co. J. W. Borrowman, per Dr. T. W. Beeman.
- 26,271 Chert knife, Lanark Co. Geo. Ritchie, per Dr. T. W. Beeman.
- 26,272 Leaf-shaped chert object, lot 4, con. 7, Drummond tp., Lanark Co. J. W. McIntyre, per Dr. T. W. Beeman.
- 26,273 Chert knife, lot 26, con. 7, North Burgess tp. P. Bennet, per Dr. T. W. Beeman.
- 26,274 Chert knife or scraper, North Burgess tp. P. Bennet, per Dr. T. W. Beeman.
- 26,275 Black chert knife, lot 19, con. 9, Drummond tp., Lanark Co. Dan McKeown, per Dr. T. W. Beeman.
- 26,276 Arrowhead, Lake Rideau. Ernest Jamieson, per Dr. T. W. Beeman.
- 26,277 Arrowhead, Jones Falls, Lanark Co. Dr. T. W. Beeman.
- 28,278 Quartzite arrowhead, lot 13, con. 10, N. Elmsley tp., Lanark Co. Wm. Gilchrist, per Dr. T. W. Beeman.
- 26,279 Flint scraper, Talon Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,280 Slate chisel, Talon Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,281 Arrowhead, lot 25, con. 6, Fullerton tp. John Butters, per Dr. T. W. Beeman.
- 26,282 Soapstone pipe, Rideau Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,283 Part of slate implement, lot 25, con. 10, Bathurst Tp, Lanark Co. Chas. McKay, per Dr. T. W. Beeman.
- 27,284-98 Chert and quartz arrowheads, etc., Rideau Lake. Dr. T. W. Beeman.
- 26,299. Arrowhead, peculiar form, Rideau Lake. Dr. T. W. Beeman.
- 26,300. Rough unfinished stone axe, Rideau Lake. Dr. T. W. Beeman.
- 26,301-2. Two small celts, Rideau Lake. Dr. T. W. Beeman.
- 26,303. Very fine adze, Rideau Lake. Dr. T. W. Beeman.
- 26,304-6. Fragments of clay pipe bowls, Rideau Lake. Dr. T. W. Beeman.
- 26,307. Pottery fragment, Rideau Lake. Dr. T. W. Beeman.
- 26,308-9. Bone awls, Rideau Lake. Dr. T. W. Beeman.
- 26,310. Bone pin, Rideau Lake. Dr. T. W. Beeman.
- 26,311. Bone, sawed in preparation for making beads, Rideau Lake. Dr. T. W. Beeman.
- 26,312. Bone tube, Rideau Lake. Dr. T. W. Beeman.
- 26,313. Scraper made of quartz, Rideau Lake. Dr. T. W. Beeman.
- 26,314. Fragment of stone pipe, Rideau Lake. Dr. T. W. Beeman.
- 26,315. Fragment of stone gouge, Rideau Lake. Dr. T. W. Beeman.
- 26,316. Small stone celt, Rideau Lake. Dr. T. W. Beeman.
- 26,317. Fragment of stone implement, Rideau Lake. Dr. T. W. Beeman.
- 26,318. Stone implement, Rideau Lake, Dr. T. W. Beeman.
- 26,319-21. Stone implements, Rideau Lake. Dr. T. W. Beeman.

- 26,322-45. Pottery fragments, Rideau Lake. Dr. T. W. Beeman.
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- 26,346. Chert drill, Illinois. David Boyle  
 26,347-513. Arrowheads, Southern Indiana. David Boyle.  
 26,314-16. Perforators, Southern Indiana. David Boyle  
 26,517-24. Scrapers, Logan county, Central Illinois. David Boyle.  
 26,525. Fragment of pipe bowl, Central Illinois. David Boyle.  
 26,526-30. Four adzes and one gouge near Midland. David Boyle.  
 26,531-35. Prehistoric pottery from cliff dwellings near Baker's Butte, Yavapai County, Arizona. J. W. Benham, Phoenix, Arizona.  
 26,536. Bone and iron arrowhead spliced. David Boyle.  
 26,540. Skull (Indian) lot 4, con. 2, Edwardsburg, Ont. Rufus Froom, Cardinal, Ont.  
 26,541-43. Leg bones (Indian) lot 4, con. 2, Edwardsburg, Ont. Rufus Froom, Cardinal, Ont.  
 26,544. Roughly blocked out animal form in Huronian slate, probably intended for a pipe. Somewhat resembling 11,103 but possessing a better finish. Its greatest height is six and three quarter inches, breadth three and a half, and thickness one and three-eighths. It was found on the farm of Mr. Leith, in the township of Binbrook, South Wentworth; by exchange from Mr. Cary W. Hartman, Cincinnati, O.
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- 26,545. Skull, perforated with six holes, Wormian bones, no under jaw. Dr. J. E. Brown, Arkona, Ont.  
 26,546. Skull, perforated with three holes. Imperfect. Of person probably eighty years of age. Dr. J. E. Brown, Arkona, Ont.  
 26,547. Skull. Dr. J. E. Brown, Arkona, Ont.  
 26,548. Skull. Imperfect lower face, under jaw missing, Wormian bones on right side of occipital suture. Dr. J. E. Brown, Arkona, Ont.  
 26,549. Frontal bone of child's skull. Dr. J. E. Brown, Arkona, Ont.  
 26,550. Shoulder blade, vertebræ, and six arm and leg bones from the grave where the skulls were found. Dr. J. E. Brown, Arkona.
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- 26,551. Musical instrument, eight bamboo tongues mounted on an ornamented burnt-wood box 11x3½ in. and 1½ in. deep, Kroo Coast, W. Africa. Dr. James F. Boyle, Toronto.  
 26,552. Money pouch, ornamented leather. Procured from a native's person, off Gold Coast, W. Africa. Dr. Jas. F. Boyle.  
 26,553. Ju-ju or fetish. Carried by natives on going to war in Southern Nigeria, Bight of Benin, Africa. It is worn suspended around the loins for luck. "White men's bullets no good—no live, when we wear this." Dr. Jas. F. Boyle, Toronto.
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- 26,554. Fragment of pottery, plain, reticulated pattern, Dead river bank, surface find, Volusia, Florida U.S.A. R. J. Bonner, B.A., De Land, Fla.  
 26,555-60. Flint and jasper chips from implements. 26,558. Is a

- beautiful chip of silicified coral. Volusia County. R. J. Bonner, B.A., De Land, Fla., U.S.A.
- 26,561-72. Arrows of chert, jasper and chalcedony (surface find). Volusia County, Fla. R. J. Bonner, B.A., De Land, Fla. U.S.A.
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- 26,573. Large, well-made, and slightly grooved stone axe, lot 7, con. 13, North Orillia. Amos Rogers, Washago.
- 26,574. Plain, and much-weathered stone axe. Has the appearance of being unusually old. lot 7, con. 13, North Orillia. Amos Rogers, Washago.
- 26,575. Small, flat and somewhat rudely made stone axe. J. Sandow, per W. H. Elliott, B.A., Toronto.
- 26,576. Egg-shaped, water-worn stone, from village site, Clarksburg. May have been used as a club head, but shows no sign of workmanship. Frederick Birch, Wodehouse.
- 26,577. Gorget or tablet, broken. Remaining hole is unusually large—nearly three-eighth inches in diameter, flaring to five-eighth inches on one-side. Mr. Samuel Wiley, lot 7, con. 7, Euphrasia, per F. Birch, Wodehouse, Ont.
- 26,578. Gorget or amulet (two holes), from village site near Clarksburg. Frederick Birch Wodehouse. This somewhat remarkable specimen is simply a water-worn stone, the almost perfect symmetry of which has attracted the attention of some Indian who bored the holes through it. Frederick Birch, Woodhouse, Ont.
- 26,579. Left half of an ox-shoe, Mud Turtle Lake. Frederick Birch, Wodehouse, Ont.
- 26,580. Chert arrowhead, unbarbed, with long neck, Tamworth, Addington county. Rev. W. H. Adams.
- 26,581. Bone awl or needle, from near Clarksburg, Ont. Frederick Birch, Wodehouse, Ont.
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- 26,582. Unfinished soapstone pipe, slightly curved, from shore of Dalhousie Lake, Lanark county. Dr. Beeman, Perth, Ont.
- 26,583. Rubbing-stone, found on the shore, of Dalhousie Lake, Dalhousie township., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,584. Probably the portion of a stem of a pipe known as the platform pipe, an unusual form in Ontario, Dalhousie Lake, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,585. Rubbing-stone, in which some round object has been smoothed or polished, Dalhousie Lake, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,586. Woman's slate knife (semi lunar). Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,587. Part of a gorget with two holes, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,588. Slate knife (arrow-head shaped), Dalhousie township, Lanark County, Dr. T. W. Beeman, Perth, Ont.
- 26,590-1 Small lance-shaped specimen commonly known as a pottery marker. Dr. Beeman, Perth, Ont.

- 26,592 Piece of soapstone cut and broken from a larger portion showing the method of separation, Dalhousie Lake, Dalhousie tp., Lanark County, Ont. Dr. T. W. Beeman, Perth, Ont.
- 26,593 Small and well made stone axe or chisel, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,594. Stone axe found on the shore of Dalhousie Lake, Dalhousie, tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,595. Small axe of felsite, sharpened at both ends, roughly made but well polished, shore of Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,596. Small gouge, only slightly hollowed, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,597. Small stone axe, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,598 Small stone chisel, four inches long, tapering rapidly to the head, Dalhousie lake, Dalhousie tp, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,599. Very small and somewhat roughly made chisel. Specimens of this kind may have been fastened to the heads of clubs, Dalhousie lake, Dalhousie tp, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,600. Clay pipe head with four deeply sunk depressions around the bowl. Dr. Beeman, Perth, Ont.
- 26,601. Piece of clay pipe stem, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,602-31. Arrowheads of chert and quartzite, various sizes and shapes, from Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,632-33. Two scrapers, found on the shore of Lake Dalhousie, Dalhousie tp, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,634-59. Fragments of pottery bearing characteristic patterns, belonging to eastern Ontario, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,660. Fragment of pottery very peculiarly marked, shore of Dalhousie lake, Dalhousie tp., Lanark county, Dr. T. W. Beeman.
- 26,661. Roughly chipped specimen of felsite, probably a reject. Found on shore of Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman.
- 26,662. Small well made slate gouge, hollowed its whole length, the opposite side having an unusually large angular appearance, with a high ridge. Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,663. A fragment five inches in length of what has been an extremely large and well finished slate knife, although only a quarter of an inch thick in the middle; at the fracture, where it is one and three-eighth inches wide, a distinct central ridge extends from end to end; shore of Dalhousie Lake, Dalhousie township, Lanark county, Ont. Dr. Beeman, Perth, Ont.
- 26,664. Small steatite pipe, two inches long, almost straight, bowl very thin, workmanship good, shore of Dalhousie Lake Dalhousie township, Lanark county, Ont. Dr. Beeman, Perth Ont.



- 26,665. Skull of native woman, Queensland, Australia. Collected by Mr. G. Scovell, Toronto. This specimen bears several marks of blows received while the person was alive.
- 26,666. Pipe head, stone, stem broken. North West Territory. David Boyle, Toronto.
- 26,667. Small clay vessel from ruined city in Butler Wash., Utah. Collected by Don. McGuire, Ogden City, Utah. David Boyle, Toronto.
- 26,668. Pendant or gorget of mottled slate; one hole. Mr. Alfred Willson, C.E., Toronto.
- 26,669. Spearhead or very large arrowhead of black chert, broken front, Grand River, Pilkington township. David Boyle, Toronto, Ont.
- 26,670-76. Six small flints from Northstoke, Oxfordshire, Eng. David Boyle, Toronto.
- 26,677. Flint scraper, Thames Valley, England. David Boyle, Toronto.
- 26,678-9. Two large flint flakes may have been used as scrapers, Thames Valley, Oxfordshire, England. David Boyle, Toronto.
- 26,620. Large flint flake bleached, Bignor Hill, Sussex, England. David Boyle, Toronto.
- 26,621-90. Worked specimens of flint, Surrey, Hill, Eng. David Boyle, Toronto.
- 26,691-2. Paleoliths, Wandsworth Drift, Thames Valley, Eng. David Boyle.
- 26,693-4. Flint flakes, Ightham, England. David Boyle, Toronto.
- 26,695. Oval paleolith, Bois de Rocher, St. Helens, Cotes du Nova, France. David Boyle, Toronto.
- 26,696. Stone pipe, has originally had a human figure carved on the front side of the pipe, with the head looking towards the smoker. The head is now broken off and the edge has been rubbed down smoothly. From near the Southwold earthwork, Elgin county, Ont. David Boyle, Toronto.
- 26,697. Stone pipe, probably limestone, quadrangular in cross-section, lower end pointed, upper edge ornamented with two projecting bands. Upper edge notched in middle of each side. Near Southwold earthwork, Elgin county. David Boyle, Toronto.
- 26,698. Clay pipe bowl, Vaughan township, York county, Ont. David Boyle, Toronto.
- 26,699. Hudson River shale pebble, one and three eighth inches long, one inch wide, and one-half inch thick, rudely carved to represent a human head. what may have been the suspension hole is bored in the place of the mouth. Richmond Hill, York county, Ont. David Boyle.
- 26,700-1. Two bone needles or awls, Lansing, York township, York county. David Boyle, Toronto.
- 26,702-6. Five flints, Waterloo township, Waterloo county. David Boyle, Toronto.
- 26,707-11. Small stone chisels, York township, York county. David Boyle, Toronto.
- 26,712. Piece of soapstone, probably intended to be a pipe stem. On three sides of the specimen are the beginnings of drillings

probably made with a wooden drill, Rideau Lake, Lanark county.  
David Boyle.

26,713. Flint or chert drills, near Aurora, Indiana. David Boyle, Toronto.

26,715. Lance-shaped spear or arrowhead, nearly four inches long, near Aurora, Indiana. David Boyle, Toronto.

26,716. Lance-shaped spear or arrowhead, near Aurora, Indiana. David Boyle, Toronto.

26,717-8. Two arrowheads with serrated edges, near Aurora, Indiana. David Boyle, Toronto.

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26,719. Skull (calvarium) and imperfect underjaw, lot 14, con. 6, Whitechurch, York county. George Nelson, Toronto.

26,720. Stone axe, lot 14, con. 6, Whitechurch tp., York county. George Nelson, Toronto.

26,731-2. Fragments of pottery, lot 14, con. 6, Whitechurch tp, York county. Geo. Nelson, Toronto.

26,733. Woman's waist cloth of native grass, in alternate, longitudinal, plain, stripes of red and pale yellow, Guinea Coast, Africa. David Boyle, Toronto.

26,734. Four gambling sticks, probably Athabaskan (N.W.T.), David Boyle, Toronto.

26,735. Two gambling sticks, probably north-western. David Boyle, Toronto.

26,736-7. Two desiccated, or mummified bodies from British Columbia. J. A. Coates, Victoria, British Columbia.

26,738. Skeleton, (disjointed) of what was a mummified body, from British Columbia. J. A. Coates, Victoria, B. C.

26,739-53. Fifteen flints from Logan county, central Illinois, U. S. Most of these are very well made, and vary in size from an inch and a half to five and a half inches in length. David Boyle, Toronto.

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## WHO MADE THE EFFIGY STONE PIPES ?

All the people are not yet dead who are gullible enough, or ignorant enough to believe that iron tomahawks, brass pots, silver ornaments, glass beads, and numerous other articles of European origin were made by the Indians before white men appeared on the continent. When certain beliefs were current, attributing to our "natives," Jewish, Irish, Welsh, Phœnician, Egyptian and Mongolian ancestries there was something like a method in the madness of the theorists. but now-a-days we have, or rather, some of us have, adopted views calculated to make it appear that although there may be nothing in the extraneous-origin theory, yet the Indians belonging to this part of America were indebted to European influence for inspiration affecting some very simple devices.

It has recently been asserted with an attempt to show proof, that all our Indian smoking-pipe forms, except the straight one, are of European origin ; or, to put it in another way, that to the influence of European contact is attributable all the forms in question, as well as the effigy styles of ornamentation. This is equivalent to the contention that those who had sense enough to contrive the simplest form of device, viz.,—a straight tube, for the consumption of tobacco, were so utterly devoid of ingenuity, or of adaptability, or of taste, as to be unable to take another step—such a step, for example, as would be necessary in the case of a piece of stone, which, not being perfectly straight, would require the boring of a hole from each end to meet at the angle or curve. However slight any variation of this kind might have been, it would be sufficient to originate the notion of two holes meeting at any angle, and thus, in process of time, to suggest a bowl and stem at right angles to each other.

But there was another way by means of which a modification of this kind could have been brought about. A bit of stone may have been very desirable for the bowl of a pipe, but lacking material to form a long enough stem, or, indeed, any stem at all. Here, then, the savage's knowledge of woodcraft would stand him in good stead, and it would not demand very great inventive genius to think of boring a hole in the side of the bowl to receive a twig of alder, or other wood from which the pith had been removed. We have numerous examples of both very short-stemmed, and of stemless stone pipes, or pipe-bowls, in our museum cases. In one instance the perforation is at the base of the bowl and almost in line with it, but most of the stemless examples are bored at right angles. In the oldest forms of short-stemmed specimens, the bowls and stems form angles more or less obtuse, while in those that are of unmistakably recent origin they are at right angles, or, nearly so.

This is not by any means an attempt to show the evolution of the typical form of pipe from the cigar holder through the straight stone tube, but is merely to emphasize a statement of the belief that without any European influence, and long before there was any on this continent, the aborigines were capable of producing, and did produce, a multiplicity of shapes and "conceits" in this line of work.

If, to what has already been said, we add that smoking has probably always possessed some ceremonial or worshipful significance to many American peoples, we have a very powerful argument favoring the independent modification and ornamentation of pipes.

Nothing, however, can be clearer to even a beginner in the study of American archæology than that a very large number of tobacco pipes owe much, if not everything, to British, French, Spanish and Dutch contact with the Indians. Sometimes this shows itself in the shape alone, but quite as frequently in connection with the character of the workmanship, and the style of ornamentation.

It is but fair to state that in what I regard as the very oldest graves I have seen opened there were no pipes of any kind. At first sight this seems to favor the view that pipes were not in use among the Indians at the time the ancient interments were made, but this conclusion would be too sweeping, for, although those who made the graves in question may have adopted the smoking habit, it may not have been their custom to put pipes in graves at burial times. In any event, it would be quite as logical to affirm that the absence of flints and celts from graves in Ontario, indicates that the people, whose graves these are, were not possessed of such weapons or tools.\*

That a good many pipes evidence European influence would seem to be regarded as conclusive that *all pipes of common form so originated*, but this is absurd. The shape having developed from the straight to the angular form, thus reached its highest possible development in a general way, but in matter of outline and of ornamentation the possibilities were illimitable, and why deny to our Indian the ability to produce more than simple and unadorned objects of this kind? We know that he was extremely fond of personal decoration, and no portion of his outfit was dearer to him than his pipe was.

It might not be easy to affirm whether clay or stone pipes had precedence as an invention, but in either case people who had skill and taste enough to produce a vessel of pottery decorated with pigments, or with incised lines, or to make what we designate as bird-amulets, and various other forms of so-called "ceremonial" objects, may safely be credited with sufficient sense and taste not only to vary pipe forms, but to adorn them. It would, therefore, appear much more reasonable to assume that the Indians had exemplified their art and craft in this way, perhaps, for many centuries before the Discovery; that numerous examples of such workmanship found their way to Europe as curiosities; that in course of time, when smoking became the vogue, Indian art was imitated and improved upon, and that when the white man's pipes, imitating those of the aborigines, casually found their way to America, the Indians, wholly oblivious to their own priority in this line, adopted many hints. We may go even further, and take it for granted that not a few stone pipes were

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\*These are very seldom found associated with human remains, yet they must have been in very common use. A remarkable find of "flints" (all very large) was made in a burial mound on Tidd's Island, opposite Gananoque, by Mr. C. A. See, in 1887. These are now in the Provincial Museum, having been kindly presented by Mr. See. A similar find was made in a grave on Wolfe Island. These, too, are in the museum. In both cases, and in those of the Rice Lake mounds, already referred to as being among the oldest graves I have seen opened, copper beads and other articles of this metal were found.



manufactured in the Old World for trading purposes in the New.\* It is, of course, undoubted that many white men, on this continent, either for amusement or for profit, made stone pipes, and it may quite readily be admitted that whenever it was within his power, the Indian would adopt the European methods of working, and, if possible, with European tools, but this is a totally different thing from asserting that until the advent of the white man there was no variety in the native pipe-form; and, therefore, there could be no attempt to adorn what did not exist. Just here, it may be asked, why so little is said with respect to clay pipes in this discussion? Why should not the very same arguments apply to them in a large measure? Were all American clay pipes quite straight until the unintelligent native happened to see a curved, or a right-angled specimen in the hands of a paleface? Among upwards of five hundred clay pipes in the Ontario Provincial Museum, less than two *per cent.* can, by any stretch of imagination, be regarded as bearing any resemblance to the oldest forms of English and French pipes as we may see such in collections, and we have only one at all likely to suggest a straight ancestry. It is three and a half inches long, very rudely made, covered with sharply incised lines at right angles, and is so slightly curved that on the concave side the middle is less than one-fourth of an inch lower than the ends. Of course, the convex side shows considerably more curve—fully half an inch—but the general appearance is that of straightness.

On not one of the small percentage of European-looking pipes is there any kind of ornamentation beyond three, or sometimes, four parallel lines traced round the top of the bowl, while a few are absolutely plain; and this is true, too, respecting the pipes that have more or less flared lips—the so-called cornet or trumpet specimens, which are also, on not very tenable grounds, claimed by reversionists, to owe their peculiar shape to an aboriginal idea suggested by the sight of some brass wind-instrument, or from the imitation of a pipe modelled similarly, as the result of a brilliant conception on the part of some white man, just as if no such flare had ever been produced by Indian women many thousands of times in the making of pottery vessels for domestic use, we cannot even venture to guess how long, before 1492. We may not have to wait a great while until some knowing—some very knowing—archæologist makes the announcement that clay pots of all kinds were totally unknown before the days of the Niña, and the Pinta, and the Santa Maria, the cooks of which caravels first inspired the natives potterywards by exhibiting to them the iron and copper utensils in their respective galleys, for who could be foolish enough to suppose that a savage would ever evolve such notions of æstheticism as are exemplified, not only in the fashioning of such graceful forms as we sometimes find, but in the decoration of them by means of incised or colored designs; imitations of human and other heads, and purely ornamental lip crenations and

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\* It is somewhat remarkable that notwithstanding the imputed European influence, we never find any effigy pipes of Old World material among objects that are clearly of British, French, or Dutch origin. Was it only in America that the European produced pipes of this kind?

projections; to say not a word about such pre-eminently European ideas as are embodied in occasionally supplying these vessels with loop-lugs?

Fortunately for the intellectual reputation of the Indian, through his womankind, the art of making pottery was probably the first native industry to fall into complete disuse in this part of America, on account of the immense number of brass vessels that were introduced by white adventurers during the early years of the exploratory and fur-trading periods, and although it is not at all improbable that some aboriginal pottery was produced in remote parts of the country subsequent to the time in question, no writer or student as far as I know, has yet had the temerity to impute European influence to this highly characteristic Indian industry, whether with respect to the origin, the form, or the ornamentation of the vessels.

Reverting, then, to clay or pottery pipes, we may ask ourselves the very natural question, Why should we admit the greater measure of skill, artistic excellence, and versatility which were exemplified in the production of pots, while we deny the lesser measure of these qualities in producing pipes?

Another query suggests itself, namely, How is it that little or nothing betokens European influence on clay pipes? It certainly does not appear on the square mouthed pipe; there is no sign of it where the very common, conical-headed, ape-like, sitting figures occur, nor can it be detected in connection with the various animal representations—bird as well as mammal—on the bowls. Now and again, where the human face is attempted as a model, the work is so well done as to suggest at first sight the probable presence of a white man not far away, but closer examination compels one to admit, that after all, there is nothing in the work beyond the power of a bright savage of mature years.

When we come to stone pipes, however, it must be acknowledged that the case is somewhat different, for without any doubt, many such are either wholly of white man's make, or show in some way the influence of Indian contact with the white man. Voyageurs and commercial adventurers of all kinds, no doubt, speedily acquired the smoking habit after their arrival on this continent, and nothing can be more reasonable than to suppose that during their hours of enforced idleness in camp, or on the trail, they would relieve the tedium by carving suitable pieces of stone into pipe bowls—a work of comparatively easy accomplishment with chisels, drills, saws, and files of steel. Indeed, even with nothing but a stout pocket-knife, an ingenious or handy man could readily fashion very desirable objects of this kind from pieces of limestone and soapstone, the materials from which many pipes were made. In some cases, no doubt, such pipes were produced as articles of barter with the natives, or as gifts to their leading men. In any event, the Indians similarly equipped in the matter of tools would very soon profit by the example, and produce for himself equally serviceable and ornate pipes. In this way we may account for the capped, bonneted, and hatted representations of human heads, and for the general tone in other specimens that are totally devoid of extraneous carving, as, for example, where the bowl is so accurately cylindrical as to indicate the use of a turning lathe;

yet, some of these, too, may have been made wholly without the use of such machine.

It is, as a matter of course, implied even when not directly stated, by those who assert their belief in the post-discovery origin of most pipe forms, that all such objects were manufactured with the use of steel tools. It is claimed that many of the details could not be worked out otherwise, and much is very properly made of the file-marks that exist on some pipes. Agreeing to the logic of this reasoning, we demand that a similar line of argument be employed when dealing with stone pipes that not only show no tool marks, but that on the contrary bear evidence of having been brought into shape by purely aboriginal methods. Undoubted examples of this kind are found in unfinished specimens, exhibiting purely primitive methods of shaping, boring, sawing and polishing; and the pipes are not straight, but angular, or sharply curved. The nearest unfinished approach to straightness in our collection, is in one, the bowl and stem of which form an angle of forty five degrees. In the largest and most rudely chipped specimen of this kind we have, there is proof the maker's intention to carve a head or something else on the inner edge of the lip, in which case it would probably have faced the smoker.\*

It may be advanced that the new fashion travelled faster than did the tools required to make the pipes, but a statement of this kind possesses not a shred of value when everything else associated with the unfinished objects indicates a period anterior to the Discovery, and if it be contended that even without the European appliances, the Indian succeeded in making very good articles similar in style, it is, then, virtually conceded that he was gifted with sufficient ingenuity and skill to have produced just such pipes without foreign inspiration.

The evolution of the angular pipe through the straight form, from the cigar was inevitable, even among people gifted with much less intelligence and mechanical ability than our Indians were, and a similar statement may be made respecting the ornamentation of these objects, which lent themselves quite readily to decorative skill, and which, as being connected with religious or ceremonial usages, were treated with more artistic consideration than were most other products of their handicraft.

In a recent work by Mr. Joseph D. McGuire, of Washington, D.C.,† he takes the ground that until after the Discovery, the Indians had no pipes but straight ones, and that no attempt had been made to decorate pipes with carvings of animal forms until the hint was given

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\* Dr. W. M. Beauchamp is of the opinion that pipes having carved faces turned from the smoker are of a more recent date than are those that look stemwards. See figure 2. See also remarks accompanying figure 4.

† This volume, "Pipes and Smoking Customs of the American Aboriginies, based on material in the United States National Museum," is an exhaustive study of the subject. Mr. McGuire deserves the most cordial thanks of every ethnological and archaeological student, for the great pains he has taken to bring together such an immense amount of information relative to the use of tobacco and tobacco pipes on this continent, and although most of us may not agree with his contention, that all curved stone pipes, and, indeed, every pipe not of the straight variety, are the result of European contact, we must credit him with having aroused a more critical interest in the subject of early man's workmanship in America, thus sounding a warning note, at quite an opportune time, to the numerous unreasoning theorists who infest literature with their bizarre notions.



by white people. On p. 513 of his volume a reprint from the Report of the U.S. National Museum, pp. 351-645, and fully illustrated, the following passage occurs:—

“It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art; and it may be questioned whether the small size of the pipes, thereby enabling them to be carried by the owners, sufficiently explains why pipes alone show this skill, fine carving being almost, if not entirely, unknown in other aboriginal stone objects from the area where these pipes are most often found.

“It may, with pertinence,” he proceeds, “be asked why we do not find in the mounds other images of stone finished with the skill of the mound pipe, if they are of Indian origin? The religious or superstitious feeling of the seventeenth century would draw the line at idol-making, whereas pipe manufacture would be a legitimate occupation.”

This is a lame and impotent conclusion based on false premises, and how much so, would have appeared to Mr. McGuire himself, if it had only occurred to him to read what he had written in the following slightly amended form:—“It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of European art displayed on American Indian objects; and it may be questioned whether the small size of the pipes, thereby enabling them to be carried by their owners, sufficiently explains why pipes alone show this skill, fine European carving being almost, if not entirely, unknown in other aboriginal objects from the area where these pipes are most often found.

“It may with pertinence be asked why we do not find in the mounds and graves other images of stone finished with the skill of the carved stone pipes, if they are of European origin. Although the religious or superstitious feeling of the seventeenth century would draw the line at idol-making, not only pipes but scores of other aboriginal stone objects might have been carved as a legitimate occupation by Europeans.”

If Mr. McGuire will kindly permit me to use his language in what I have called the amended form of his quotation, I shall stand sponsor for it, and await a reply with some degree of expectancy.

Meanwhile, as the original form of quotation seems to contain in epitome the whole of Mr. McGuire's contention, we may examine it bit by bit:—

(a) “It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art.” This statement may be best met (taking the latter part first) with the assertion that pipes are *not* “practically the only examples of Indian art,” unless we limit the meaning of art to the production of animal representations only; but even this is not in accordance with fact, for imitations of animal forms occur on pottery from Peru in the south to Ontario in the north. In Mexico, examples of this kind are innumerable, and in Arkansas they are not infrequent. Are all such due to European contact? If not, why should we exclude the possible spread of effigy notions among peoples in contiguity?—and, when Mr. McGuire refers to the lack of



consideration that has been manifested respecting the fact that so much more attention has been given to the carving of animal figures on pipes than on other objects, the only reply is, that nothing seemed to us more natural than to regard pipes not only as special objects of regard on the part of the Indians, but as articles, which, from their very shape, offered excellent opportunities for carving imitations of human faces, and of many lower animal forms. Thus it was not "considered remarkable" that pipes were carved "with such great skill" in the matter of animal forms. In addition to this, it may be stated, that not a few students are disposed to regard the representations as possessing a totemic value, and it might be rash to deny to some pipes a significance of this kind, for although there may not be a particle of evidence in favor of the theory, we cannot but admit its possibility on most reasonable grounds.

(b) "It may be questioned," writes Mr. McGuire, "if [whether] the small size of the pipes, thereby enabling them to be carried by their owners, sufficiently explains why pipes alone show this skill, fine carving being almost, if not entirely, unknown in other aboriginal stone objects from the area where these pipes are found." I have never heard that the small size of the pipes was ever advanced as a reason why they were carved, and as a reason it is too trivial to be worthy of notice—it is smaller than even the very smallest of pipes—and it has already been stated that fine carving is *not* "almost, \* \* \* unknown in other aboriginal stone objects from the area where these pipes are most found."

(c) As to "why we do not find in the mounds other images of stone finished with the skill of the mound pipe, if they are of Indian origin," the answer has been given under (a) and when we come to the last sentence in our quotation we find it is so self-contradictory that no reply is needed.

The simple truth appears to be that there are found in mound, ossuary and other graves, pipes that are purely and unmistakable Indian, *i. e.*, without a particle of evidence of any kind to connect them with the white man, while, quite as undoubtedly pipes of European make, or pipes made subject to European influences, have also been taken from such graves. In either case, the trouble lies in hasty generalization, and a similar difficulty is likely to arise when the contents of a burial place, or of any other deposit, are of a mixed character.

If there is no doubt that Indians lived, and died, and were buried; and that the burials were in some cases, if not in all, accompanied by certain ceremonial usages; and if in places of this kind we discover a well-made piece of pottery, an elegantly formed gorget, or a barbed harpoon, why should we hesitate to credit the American savage of these northern parts with a measure of the mechanical ability that we so willingly concede to a very large extent where Maya, Aztec, and Inca "civilizations" are concerned? In any case, we must use judgment, aside from theory, by taking into account the particular circumstances connected with our find. We should not be disposed to deny a pretty large amount of intellectuality to a race of people capable of *inventing* a birch-bark canoe, but, perhaps it will yet be

shown that no canoes existed until the natives of Guanahani or Watling Island, or some other place, had seen the pinnacle in which Captain Colon rowed ashore to pay his respects to their chief !

Under the following heads is a crude scheme of evolution showing one way in which, to the writer, it seems possible to trace the pipe's ancestry, without forgetting for a moment how precarious it is to theorize when the missing links are so numerous.

1. Smoking is an American aboriginal custom which originated, no one knows how long, before The Discovery.

2. All the aboriginal peoples did not smoke.

3. Those who smoked did so ceremonially rather than for solace.

4. The custom may have been brought about in some way from the almost universal veneration connected with fire.

5. The rising of smoke may have been suggestive of a means of communication between the upper and lower worlds—between the earth and the sun.

6. The production of smoke through the mouth, perhaps, resulted from blowing small quantities of tobacco (or other vegetable material) when ignited on the ground, or, in the hand.

7. A wooden tube through which to blow would prove serviceable, or,

8. The plant-leaves put in proper shape could be held in the mouth, as a cigar.

9. In either case inhalation and expulsion of smoke from the mouth would soon accompany mere exhalation, or blowing.

10. The use of a tube would suggest an enlargement at one end to hold the material, instead of blowing at it on the ground, or,

11. The tube may have originated as a holder for the cigar.

12. A bent, or crooked wooden tube (bamboo, or pith-stem) would afford the necessary hint for convenience to a smoker when standing or sitting.

13. When crooked stems were not procurable, a hole bored in the side of a piece meant for a bowl, would serve to receive a smaller piece to hold in the mouth. In some such simple way,—a way that requires not much inventiveness on the part of the savage, and no stretch of imagination on ours,—it is probable the idea of an angular pipe was hit upon.

14. With a knowledge of pottery, clay pipes, in imitation of the compound (stem and bowl) wooden pipe, would follow as a matter of course.

15. Decoration by means of straight, incised lines, or by lines made round the bowl, were probably suggested by a similar style of ornamentation on pottery vessels.

16. Decoration in relief would be brought about also from clay vessels.

17. Perhaps stone pipes came in after clay pipes, but the straight, stone tube is found where the art of pottery-making was not known, *e. g.*, British Columbia.

18. Old writers refer frequently to "stone" pipes which were almost certainly made of clay. Many intelligent people make a similar mistake yet.

19. Unfinished stone pipes show conclusively that many such were made by primitive methods of sawing, flaking, pecking, rubbing and boring.

20. Some of the best stone pipes exhibit much skill in bringing out animal features, yet a close examination of them, with the aid of a magnifying glass, yields no sign of marks requiring the use of anything but primitive tools to produce them.

21. Other stone pipes were just as certainly the work of white men, or, of Indians with European notions and European tools.

22. Pipes of white man's make were imitated by Indians when they could employ the white man's tools.

23. That the Indians did so is not by any means a proof that all their ideas respecting the shapes and ornamentation of these articles were derived from white man.

24. To admit that our Indians were indebted to Europeans for every notion respecting the shapes and decorative devices in pipe-making is to deny that the aborigines possessed any imagination, or much mechanical ability, and, therefore, that all the so-called "bird-amulets," and "boat-amulets," and "banner-stones" of so many patterns, and "gorgets" of shapes innumerable, and stone tubes from two to twelve inches in length, *not* intended for smoking pipes; to say nothing of the axes, and adzes, and chisels, and gouges, or of the multifarious shapes we find in bone and shell, are, without exception, products wholly beyond the inventive capacity of such natives as inhabited the basins of the St. Lawrence, the Hudson and the Ohio, which is absurd.

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## THE WORKING OF NATIVE COPPER.

The presence of copper among Indian relics has, for a long time proved a wonderful source of inspiration to those whom Dr. C. A. Peterson, of St. Louis, in a recent paper on Mound Builders, calls "half baked archæologists," some of whom regard it as a proof that the copper-workers were a superior people who preceded the Indian we know, and whom the latter exterminated. Coupled with this belief were some others; one was that specimens of this metal found in the shape of tools had been cast in a stone mould; and, another, that they had been hammered into shape—a stone "set" or swage having been used to regulate the shape. As it was claimed also that tools of this kind were tempered, we often hear the statement made that the edge of such an implement was so hard that "you couldn't touch it, (*i.e.*, mark it) with a file."

One might readily forgive a theorist whose knowledge of primitive Indian life led him to attribute a knowledge of smelting, and consequently, of casting, to the aborigines, but what should be said of those who either having tested, or having had the opportunity and appliances to test, the quality of a copper weapon, or tool, continued to insist on its marvellous hardness as a result of tempering?\*

We now know, just as well as it is possible to know anything with respect to Indian working methods, that prior to the appearance of the white man, the natives in this part of America were totally ignorant about either smelting or melting metallic substances, or of anything respecting the use of moulds; and that with regard to tempering copper they were destitute of all knowledge whatever, in which respect they were no more ignorant than civilized man is to-day, and has always been, while nothing can be more grossly outrageous than the statement that they understood the art of welding this metal.

We are, perhaps, warranted in supposing that our Indian discovered for himself that the sudden cooling of hot copper rendered it softer and more malleable, just as he must have learned that pounding the metal when cold, with a stone, caused it to split or crumble; and his knowledge of results from hammering may have taught him to reduce his material if necessary, by laborious methods of cutting and sawing, to something near the shape of the desired object, before

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\*The latest reference of this kind I observe in the St. Louis *Republic* of Sept. 6, 1903, containing an elaborate review of two books written and printed by a Rev. Dr. E. S. Curry, who lives "In the seclusion of the Ozark mountains." For this reference I am indebted to Dr. C. A. Peterson.

The writer of the editorial, no doubt inspired by the venerable author's own assertions, states that "the most interesting relic in Doctor Curry's collection is a tool made of copper and tempered harder than steel. . . . It has a handle of copper welded on the blade. Both the welding of copper and the tempering of this metal are lost arts, proving that the races which inhabited this continent thousands of years ago, were highly civilized, and, it is claimed by Dr. Curry, were far in advance of the races of to-day." Elsewhere, it is related that "a small oblong object" was discovered "cemented in the centre of a curious-looking rock" and that "this record is on tempered copper, three sides being covered with hieroglyphics and the whole scarcely an inch square. The event recorded thereon occurred ten thousand and forty six years ago, according to Dr. Curry's reckoning."

Really, when a man can calculate cupiferous, prehistoric dates so accurately, it would seem almost impertinent to characterize his statements as either knavish or foolish when he asserts that not only did the Indians temper copper but that they actually knew how to weld it, more than ten thousand years ago!



he began to use his hammer-stone. The chief objection to this supposition is, as far as I am aware, that no specimens have been found showing such a stage of progress in his work. In this connection, however, we must not lose sight of the strong probability that the native workman would, at the outset of his operations, choose a piece of copper corresponding in some measure to the size of the object he intended to make, for it should be borne in mind that the native or virgin metal assumes all sorts of jagged or ragged forms *in situ*. It is, thus, comparatively easy to find connected with large lumps or masses, pieces that are readily detachable and suitable for the making of small objects such as beads and arrow-points, without an excessive amount of hammering.

Of late there has been a slight reaction in connection with the tolerably high estimate some have been disposed to place on aboriginal, artistic and mechanical achievements. Reference is made elsewhere in this report to the disputation with respect to pipes; and Mr. Jos. D. McGuire, who has stated his belief that all but the simplest form of pipes are of European origin, directly or indirectly, has also asserted the opinion that sheet copper ornaments, whether plain or embossed, owe their existence to the white man's influence.\* In the course of Mr. McGuire's remarks replying to Mr. Clarence B. Moore in the *American Anthropologist*, Vol. 1, p. 47, 1903, the statement is made that "when copper is found in thin sheets and those sheets are embossed and ornamented with repoussé work; and when spearheads are furnished with sockets, and the sockets are furnished with nail holes, we may safely assert that white influences are proven." In this country we are concerned, in a general way only, with the difference of opinion respecting plain and embossed sheet-copper, but it may not be out of place to offer a few remarks on this phase of the discussion before referring to the portion of Mr. McGuire's statement which more closely affects Canadian copper specimens.

It would seem to be taken for granted by some writers, that all the North American Indians except, perhaps, the Mexican peoples, had, long before The Discovery period, reached a condition of non-progressiveness. It is tacitly admitted that a good deal of advancement have been made at one time, either on this continent or somewhere else, for although our natives were properly enough regarded as savages, they were, as a rule, of a much less degraded type than many we know about in other portions of the world. Now, if we concede a measure of progressiveness to the Indian here, up to a certain time, whether he was truly aboriginal, or merely the remote descendant of some long-forgotten ancestor from beyond the Atlantic on the one hand, or the Pacific on the other, why should we argue that in process of time he came to a dead stop?† It is not likely that such a

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\* *The American Anthropologist*, vol. 5, Jan.-March, 1903, contains a discussion on "Sheet Copper from the Mounds." It is contended by Mr. Clarence B. Moore, of Philadelphia, that the sheet copper found by him in the mounds of Florida is of purely native origin, while Mr. Jos. D. McGuire, of Washington, holds that it has been produced subject to European influences.

† It is not overlooked that many instances are known of what appear to be, or to have been, absolute non-progressiveness—lapsed potentiality—among peoples in various stages of advancement, but there is no evidence that the natives of America were in this condition.

view holds good even when much less advanced peoples are concerned. The potentiality involved in the taking of one step warrants the belief that another step is not only possible but probable. In very low conditions of society steps thus taken may be short and with long intervals, but variation of environment means progress or extinction to all living things. It has never been asserted that when Europeans reached America there was any indication or any likelihood of the aborigines disappearing, notwithstanding that something like chronic warfare was waged among many tribes of them. On the contrary, there is reason to believe that not a few tribes or "nations" pursued tillage to some extent, and were peacefully inclined. We know that some lived on the sea-coast, and some inland; some on the plains, and others among the hills; some where four-footed game was plentiful, and many depended to a large extent on lake, or sea, or river fish. Then there were dwellers in warm as well as in cold latitudes, and there were without any doubt, those of cosmopolitan tastes—rovers; others who had been, or were, captive slaves, besides thousands who were, for various reasons, adopted. Aboriginal life, therefore, was not on a continental dead-level, although there was undoubtedly much sameness. In such conditions, therefore, as have been adverted to, an Indian must have proved an unusually low specimen of our race, if he failed to accomodate himself in some measure to his surroundings. It is absolutely certain that he did so accomodate himself, and it is scarcely necessary to adduce any proof to this effect. Mere mention may be made of the birch-bark, elm-bark, and solid wood canoes; of the bark and the skin wigwams, and teepees; of pottery and basketry in multitudinous variety; of stone axes and adzes, plain and grooved; of stone gouges, or hollow adzes; of stone beads and numerous other forms of personal decorations in the same kind of material, as well as in bone and shell; and, in every case, of such a character as to preclude the remotest suspicion of European provenience.

We are hazarding no wild guess when we surmise that primitive man's inventiveness was chiefly the result of hints afforded by natural conditions, or by conditions arising from inevitable changes in his mode of life. In other words, he possessed a measure of adaptation. Having arrived at what he regarded as the best form of any tool or weapon, he choose for his purpose such a piece of material as, with least labor, would yield the desired result. In this way, a bit of sheet copper from a fissure would be quite enough to suggest to the aboriginal mind this or that use, to which such material might be applied. Copper in this condition is not infrequently found. For a good many years I had a specimen of this kind about three inches long and from an inch-and-a-half to two inches wide, much thinner than any sheet-copper of commerce I have ever seen.\* Again, in the making of spear or arrow-heads, it was necessary to hammer or rub the copper so thin that portions of the metal forming the edge of the object would become unduly attenuated. In some such way, if in no other, the man who failed to get the idea of making a sheet, however small, if he wanted one, must have been in a condition of imbecility we would not expect

\* Mr. McGuire himself refers on p. 34 to the native metal being found in this form, when he says, "the crude metal is primarily in the condition found in the mine; that is, in the nugget or in the sheet as found in the fissure of the rock."

to find in the case of one who was capable of using a hammer with so much skill. In some similar adventitious manner, the art of embossing may have been suggested.

But it is when the statement is made that "when spear-heads are furnished with sockets, and the sockets are furnished with nail-holes, we may safely assert that white influences are proven," that we, in Ontario, are most concerned. It may at once be admitted that a considerable proportion of native copper tools and weapons, more especially those made with sockets, show in their production a greater degree of skill than is usually credited to the Indian, and it is not at all unlikely that in some cases the objects in question were either of white man's make, or the result of the native smith applying white man's methods. The socket is pointed to as a proof of "white influences." Now, what is a socket? It is simply the opposite of a tine, or tang—a bearing to receive a handle, instead of being received by one, and a device of this kind must have been known to the Indian long before he discovered the malleability of copper. At any rate, he employed socketed horn and bone arrows, that is to say he hollowed the ends of antler-tips, and of bones, or he used in the latter case existing hollows, for the insertion of a shaft. Without this hint, however, it would appear almost impossible to manipulate copper very long without having the idea of a socket suggested. The hammering of the edges of a flattened piece would tend to curvature, and a very interesting example of this kind is figured by Mr. Clarence B. Moore, on page 371 of his last excellent volume, "Certain Aboriginal Mounds of the Florida West Coast, and of the Apalachicola River."\* In this example the workmanship is rude enough in character to be regarded as purely aboriginal, yet we are not to conclude that the maker had any notion of forming a socket. Having beaten the virgin metal out until the edges were too rough and jagged to hold in the hand, the workman simply hammered them down, and, in so-doing, they naturally took a curved form, because the material was too thin to receive directly the full force of the blows. Such a circumstance as this, was, in itself, enough to suggest the socket idea, for there was the receptacle, and what could be more natural than to think of pushing a stick into it, just as one would slip his foot into a moccasin, or his hand into a mitten.

For a long time, I was, myself, somewhat dubious respecting the ability of a savage to produce such specimens of copper-work as even the small collection in the cases of the Provincial Museum illustrate, but when one takes into account the extreme ductility of this metal, and the comparative ease with which it may be brought very closely to any desired form mainly by cutting, laborious and tedious as the processes may have been, the wonder as to how the work was done ceases to a very large extent. When it is known to us, as Mr. McGuire correctly states, "that almost from the very beginning of the hammering process the metal begins to crumble whether hammered cold or hot,"† we may safely enough credit the Indian with

\* "Certain Mounds," etc. Reprint from the *Journal of the Academy of Natural Sciences of Philadelphia*, Vol. XII. Philadelphia, 1903.

† *American Anthropologist*, p. 34, Vol. I, 1903. This statement is a little too strong, for pure copper will bear a good many blows before it shows signs of breaking up.



having, in his own crude way, made a similar discovery, and being thus led to conclude that the more cutting and the less hammering he had to do, the better. That he did make use of copper long before he ever saw or heard of a white man there cannot be any reasonable doubt, and it is almost equally certain that in doing so his object was rather to produce articles for personal decoration, than for purposes of utility. Like all others in similar conditions of society, as well as like most of ourselves, he had an eye for natural beauty, and for oddities in such objects as came within his field. A streak, a spot, a glitter, a sheen, a sparkle, an uncommon color, or any peculiarity in form, if usefully or decoratively adaptable, attracted his attention. To him, therefore, a stone that was soft, that he could hammer, that was easily polished, and which, when polished, was so beautifully bright, must have proved a more than commonly desirable thing; and, to those whose habitat was in the neighborhood of such deposits, a highly valuable object of exchange.

It is probable that, as already stated, most, if not all, of the so-called copper "tools" were, in reality, more for ornament than use, or, for employment in usages *ceremonial*, to use what is sometimes a much abused word. As cutting-tools they could not keep an edge as well as those made of chert, or other more purely silicious material; and as spears, arrows or fish-hooks their use must have proved very inadequate when compared with results from less yielding material like stone and bone. Still, it would be rash to assert that copper in implement shape had no practical use, for one may readily imagine various purposes to which tools of this kind might have been applied.

It would appear, therefore, that to cast any doubt on the pre-discovery Indian's ability to imitate in copper what he already had before him in numerous forms as the equivalent of sockets in wood, bone, leather and textiles, is to place him in a mentally inferior position as compared with other aborigines, who, with extremely low brain capacity, have produced mechanical devices of marvellously ingenious kinds; and this view of the case is materially strengthened when it is remembered that there is not a particle of evidence to show that sockets are of post-discovery date.

It is also contended that the presence of nail-holes in copper sockets is a reason for the assertion "that white influences are proven". Is it? Much of what has been said respecting the evolution of the socket applies in a modified way to the nail-hole. The use of holes for attachment purposes is an ancient Indian device, as a substitute for pockets, and we know that cracked pottery and "banner-stones" were held together by means of holes being bored on each side of the fracture for thong-binding purposes. (Figures 29 and 30). Holes were bored through stone and clay discs from one-fourth to one-half of an inch in thickness; similarly, slate tablets or gorgets were supplied with from one to half-a-dozen or more perforations; deep ones had to be made in the production of smoking pipes, and we find stone tubes from two inches to upwards of a foot in length accurately drilled, and sometimes with a much smaller opening at the one end than at the other. We have examples also of fragments of large shells, bored not only sidewise, but edgewise; in the latter way for the purpose of making the kind of bead known to the Iroquois as-

*runtée*; but, what is still more to the point, we find quite a number of bone harpoons or spears provided with holes for handle-fastening purposes. It may, no doubt, be urged that the last-mentioned device is the result of European contact, but it is quite easy to make a statement of this kind respecting almost anything the Indian ever produced.

It is more likely that holes made in bone harpoon haft-ends were to receive sinews or thongs, rather than anything in the shape of a nail, or of a rivet, and the same may be said with regard to holes in the sockets of copper tools. We, as a matter of course, would use a metal nail, or something in the form of a pin, but is more probable that the Indian employed a ligament. But, tacitly admitting as Mr. McGuire does, that the "nail-hole" in a socket, or in a half socket (for it is this, and not a whole, or closed receptacle, these tools and weapons have) is quite as characteristic of the white man's work as is the socket itself, why is it that so small a proportion of the copper specimens intended for a handle are so provided? Would not the white's influence extend to the hole as well as to the socket which he had taught the Indian to make? Why, then, are there many more non-holed than holed sockets?

That the Indian recognized the difficulty of perforating copper is evident from the somewhat ingenious device he adopted to overcome it in the making of beads, an art which, it will scarcely be claimed he owed to the white man. The material for these he shaped in short bars, "scarfing," as a blacksmith would say, each end; that is, making it wedge-shaped, so that when bent to make the ends overlap, the thickness did not exceed that of the other portions; while an aperture remained in the middle of the simple coil. By this means, too, he succeeded in getting a much smaller hole than if he had attempted to drill it.

But in the perforation of such thin material as the socket of a spear or of an arrow he would meet with no difficulty in boring a hole from an eighth to three-sixteenths of an inch in diameter by means of a flint point, and should anything in the way of suggestiveness have been required, examples must have occurred frequently during the course of the hammering process.

From these and other considerations there would seem to be no doubt that copper manipulation was practiced by the Indians long before The Discovery, and that the invention, or application of the socket, as well as the use of a tying-hole, in connection with arrow and and spear-heads, is wholly due to aboriginal ingenuity or adaptiveness.

There is, however, as little doubt that the white trader provided himself with articles of copper as merchandise, just as he is known to have done with wampum and with pipes—a proof, it may be advanced, that all the imitated objects were regarded with more than common esteem by the Indians. In this connection, too, we are absolutely certain that the wampum of white man's make was as close a copy of the aboriginal hand-made article as a turning lathe could produce, because the Indian clearly preferred his own medium of exchange to the metallic and immensely more valuable currency of the European. Intensely conservative as we know our natives to have been (as, indeed, most aborigines are) are we not warranted in

claiming that not only white man's wampum, but white man's pipes, and white man's copper tools and weapons were produced in close imitation of Indian workmanship, and to satisfy Indian taste rather than that the whites introduced totally new patterns, and that the Indians gladly adopted them? To admit European intrusion thus, is simply to recognize the trading instinct that has always characterized those of our own race. Birmingham Buddhas, and Manchester calicoes are exported to India, but the Hindus made bronze idols and cotton cloth long before they had any dealings with John Kumpanee. The "coppers" (large sheets of metal weighing many pounds, and peculiar to British Columbian Indians)\* were imitated and employed for commercial purposes by the Hudson Bay Company, but these, and other instances of a similar kind that might be adduced, would lend no color to any statement respecting the European origin of Buddhas, and calico, and "coppers."

Hitherto there has, undoubtedly been a lack of discrimination with regard to the origin of some American material from places of former Indian occupation, or association, but the equally indiscriminate claim set up by Mr. McGuire will probably lead to a more intelligently critical examination both of future finds, and of much that now reposes in museum cases.

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Since the foregoing was written, I have had an opportunity to examine two specimens of worked copper, belonging to Mr. H. A. Van Winckel. One is a small axe-blade, three and three-eighth inches long, fully a quarter of an inch in thickness, and of the usual shape, tapering from an inch and five-eighths in width at the cutting edge, to seven-eighths of an inch at the poll; the other is a four-barbed spear or harpoon, a little over nine inches wide, and varying in thickness from five-sixteenths of an inch, on the back, to one-eighth along the barbed edge. There cannot be a doubt that both have been made by cold hammering. The scales and laminations resulting from overlapping and pounding are quite plain, while on the harpoon there has been made an awkward cut with a thick-edged tool, like a stone axe or chisel. On both, are striæ, the parallelism of which is strongly suggestive of file use, those on the axe being much finer than those on the spear. Should it prove that the marks in question are the result of files, it would only go to show that the probable Indian workman used for finishing purposes a more effective tool than a piece of sandstone. All the markings on the little axe, except those on the cutting edge, extend from end to end of the implement as if it had been "draw-filed," and are more difficult to account for on the supposition that a steel file was employed to rub it, than that it was rubbed lengthwise over some finely gritty bit of stone.

The barbs of the spear have clearly been made by cutting, as the inner, or lower edges of them are quite rough, which would not be the case had they been filed into shape. The appearance of the inner angle also leads to a similar conclusion.

As Mr. Joseph D. McGuire, the author of "Pipes and Smoking Customs of the American Aborigines," may be properly regarded as

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\*An excellent specimen of one of these very remarkable objects forms part of the British Columbia collection in the Prov. Museum.



the chief exponent of the view that to European influences, the Indian owes his knowledge of effigy-pipe making, as well as of all that is best in the copper-smith's art, he was supplied with a copy of the foregoing article in manuscript, and there can be no doubt that all who are interested in the subject will be much pleased to read the following reply which he has been good enough to make.

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#### REPLY TO WHO MADE THE EFFIGY PIPES?

*By Joseph D. McGuire.*

I am obliged for the privilege accorded me, to print anything I have to say controverting Mr. Boyle's statements contained in this memoir in reference to pipes, as well as to certain copper objects. I know no one more familiar with these objects than he is, and the subjects being yet in the controversial stage it is only fair to present both sides. It is a pleasure to find that he agrees with me on so many points, yet there are others of radical divergence, to some of which I shall call attention, and shall point out one or more cases in which he does not appear to have properly weighed available material. My publication covered three hundred pages on a subject which had scarcely been touched upon by any prior author; most of the material had to be taken, a sentence here, a sentence there, from a host of old publications relating to early contact with the North American Indian. Much material was gathered and some years were spent in compiling the paper. All references to pipes and pipe customs were copied on library cards and every item believed to weigh on the subject was preserved. In all, two thousand and more cards were collected, many of which were to a certain extent contradictory of others yet every extract was used when not a duplicate, nothing was suppressed; in addition much labor was performed with primitive tools, and my own views were freely expressed with little thought of the controversies which such expression would give rise to, by reason of certain of them being different from accepted beliefs. All pipes were found to be distributed over certain geographical areas; and of the sixteen or seventeen varieties each was found to belong to a particular contiguous area, and with one exception, these areas were small when compared with the whole area of the continent; that exception was the tubular pipe which was found to belong to no particular locality, a strong argument to its antiquity and to its being the original type; they were found to be made of bone, wood, pottery and stone, as well as of wood and stone combined. Other pipes of other forms were found to correspond in a measure with the spheres of influence of French, British, Spanish, etc., and such influences with others led the writer to believe that their shape, the work on them, and the characteristics of the work showed European influences. What the Indian was able to do was not at issue and has not entered the discussion until now, for it will be seen that Mr. Boyle and I agree on the subject as to what the Indian was capable of under the white man's influence. Were extraneous proof of this necessary we have it from Garcillas de la Vega, who says that the native workman soon learned



to excel his master in the use of tools. The imitation of the flaring mouth of a trumpet in certain pipes of the Iroquoian type is so pronounced, that it is a surprise that one should consider it at all likely to have been evolved from a pottery vessel, for such a flare as occurs in the rim of such pipes is never seen in pottery vessels that have come under the writer's observation.\* The assertion that little or nothing betokens European influence on clay pipes raises a question of judgment between us, for to my mind there is no stronger evidence presented anywhere of European influence than is shown in the Iroquoian pottery pipe. The paste from which it is made shows it, the hard burning of the clay strengthens the belief, while the modeling of the figures seen on many of them is typically European, and quite distinct from any clay modeling found elsewhere in America. The heads seen on these pipes are of European type, the heads of birds are treated according to European technic, while the figures often observed on the faces of the bowls are but copies of the sacred pictures in the Catholic churches. Mr. Boyle admits that "Now and again when the human face is attempted as a model, the work is so well done as to suggest, at first sight, the probable presence of a white man not far away, but closer examination compels me," he says, "to admit that after all there is nothing in the work beyond the power of a bright savage of mature years. When we come to stone pipes it must be admitted that the case is somewhat different." I will be glad to have our differences of opinion judged from the above quotation, compared with any assertion in my paper on pipes. To agree that any Indian could model either of the bird pipes illustrated by me from the Douglass or Beauchamp collection, intensifies the belief that he and I look at art from greatly divergent points. The subject is one, however, that must be fairly studied, and deliberately judged upon evidence, and the final judgment will then be of value. Mr. Boyle again falls into error in asserting that "It is, as a matter of course implied even when not directly stated by those who assert their belief in the Post Discovery origin of most pipe-forms, that all such objects were manufactured with the use of steel tools. It is claimed that many of the details could not be worked out otherwise, and much is very properly made of the file marks that exist on some pipes." In this instance, I evidently represent "those who assert," but I do not suggest, nor have I even believed, "that all such objects were manufactured with steel tools." That the pipe can be bored, pecked and ground into shape with primitive tools I long since demonstrated, and exhibited such pipes and examples of the boring, and grinding, and pecking of stone, at Chicago, along with the rude tools employed in the work. It is a pleasure to find that Mr. Boyle agrees that much is properly made of the file marks which exist on some pipes, for a recent author asserts that there are no pipes having file marks on them in the museum, and says the supposed file marks can be easily imitated; naturally, when such a point is reached further discussion becomes distasteful so that others must settle the matter. It may

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\* There are in the Provincial Museum several clay vessels well curved outwardly at the lip, quite as much so, indeed, as are many of the pipes but not to the same extent as appears on a few of the pipes—still, enough, and more than enough to have proved suggestive. D.B.

be appropriately stated here, that the type of pipes upon which tool marks are most commonly encountered are usually finished with a glass polish, itself a suspicious feature, they are often so carefully smoothed as to leave no tool marks visible. It was only by observing these file marks in an unfinished specimen that search for others was instituted, and similar marks were found in a sufficient number of instances to satisfy me of the correctness of the opinion expressed which I see no reason to modify.

I am compelled to deny that anterior to The Discovery, the Indian ever "succeeded in making very good articles very similar in style," and consequently cannot "concede that he was gifted with sufficient ingenuity and skill to have produced just such pipes without foreign inspiration."

Mr. Boyle takes issue with my remarks, saying that "it is a lame and impotent conclusion based on false premises" to assert as I did, and as I reiterate, that "It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art, unknown in other aboriginal stone objects from the area where these pipes are most commonly found." It is to be remembered here that in the instance quoted I was discussing the curved-base mound-pipe, the bowls of which are commonly carved exquisitely in the shape of men's heads, and of snakes entwined around the bowl, of turtles on the bowl, and of birds and animals of many different species, one bird being represented in the act of feeding. Two hundred such pipes were found by Squire and Davis in a mound in Ohio, all of which, except a very few now in the American Museum of Natural History, are in the Blackmore Museum, in England. These carvings are not approached in artistic skill by anything else in Aboriginal American art in stone. That the imitation of animal forms does occur on pottery "from Peru to Ontario" is not germane to the subject, and no matter how innumerable they may be in "Mexico" or in "Arkansas" it will only be necessary for any one to compare the difference in such animal forms with the forms on these curved-base mound-pipes to be convinced that the one represents savage art, that the other is typical of the finest type of art in carving, as practised in Europe during the colonial period. The imitations of animal forms on pottery, and more pronouncedly such representations on stone in America wherever found of Indian origin, are rude in the extreme when compared with the forms of the figures on the curved-base mound-pipes, with the form of the monitor pipe or with the figures of many of the unornamental effigy pipes, or with many of the Iroquoian clay pipes. One thing strongly influencing me in concluding that the curved-base type of pipe was due to foreign influence was that certain of them were found to have been bored out by means of a tubular cylindrical drill, the end of one of these drills was apparently loose on the shaft, having made a hole of peculiar shape in excavating the bowl. This was almost certainly owing to have been bored by means of the pump drill, an implement not believed by the writer to have been of use in America prior to the coming of the whites. Further, it is known that the mounds have in many instances been found to contain crucifixes, medals, coins and other objects of European origin.

I considered nothing "too trivial to be worthy of notice" and the suggestion that I have done so impresses one with the necessity, which everyone labors under to tell all and to leave nothing unsaid, which even remotely relates to the subject under discussion. What aboriginal invention of the birch bark canoe has to do with the making of pipes, I fail to see.

As to the scheme of evolution of the pipe which Mr. Boyle arranges under numbered paragraphs, I see nothing to criticise up to the 24th paragraph, as it apparently coincides with my own views, nor do I find therein many missing links, though one article at least, namely, stone tubes from two to twelve inches in length, I believe to be drilled by European tools if not machinery, and other of the articles enumerated are deserving of critical study before one would be justified in the expression of a reasonably accurate opinion concerning their origin.

I do not believe that all pipes, but do believe that many pipes, are due to foreign influence in shape and modes of manufacture, and that in shaping many of them the file and other cutting tool of the whites were used. "Now-a-days," says Mr. Boyle, "some of us have adopted views calculated to make it appear that the Indians of this part of America were indebted to European influence for inspiration respecting some very simple devices." I do not hesitate to say that I have no doubt on the subject, and think that a careful reading of what Mr. Boyle has herein written will convince the reader that he has in certain instances practically admitted the case to be so. He opens his paper by showing some of the curious beliefs concerning the American Indian which at one time were considered plausible, but which have since been abandoned; rest assured, there are yet others that must give way to archæological study. Certain objects of stone we know, from recorded history, were presented to the natives by nations; others, we are informed, were traded in probably wampum pipes and stone axes or celts. This trade has extended over both Americas, from the earliest period of white contact, but few of us have ever seen a specimen, the owner of which would admit the possibility of its being post Columbian. I am glad to say that mature deliberation convinces me of the correctness of my position originally expressed, and regret not to be able to agree with those who differ with me; one of us must be wrong, but which one is the query?

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#### NOTES ON COPPER WORKERS.

*Jos. D. McGuire.*

Mr. Boyle asserts that I have stated my belief that sheet copper ornaments, whether plain or embossed, owe their existence to the white man's influence, and correctly quotes me as saying that "when copper is found in thin sheets and these sheets are embossed and ornamented with repoussé work, and when spear heads are finished with nail-holes, we may safely assert that white influences are proven." It should be remembered that this copper is of great thinness, and is not, as an old writer has said, such as could be bent by the fingers, but is



of less thickness than is commercial sheet tin, and of equally uniform surface. Mr. Boyle admits that "he was somewhat dubious respecting the ability of a savage to produce such specimens of copper work as even the small collection in the Provincial Museum illustrates; but," etc. I am not familiar with the contents of the Provincial Museum, though, if its specimens at all resemble, as I presume they do, those in the New York State Museum, recently illustrated by Dr. Beauchamp, they cannot be compared with the sheet copper from Florida, for I cannot see the slightest resemblance between the two. There is, however, a great similarity admitted between the copper from Florida and a sheet of thin copper from a Georgia mound, the figure on which resembles an eagle or hawk with wings spread and head turned to the side. The repous-é work is of a regular, geometric pattern, which suggests, it is believed, some of the characteristics of early European armor. In at least one instance, thin sheet copper was found in a mound said also to have contained the bones of the great auk, and also the bones of a dachshund. Yet, as the copper analysis showed the copper to be of American origin, the probable foreign origin of the bones was ignored as unworthy of consideration.

The brain capacity of the Indian does not properly enter the discussion nor does the Pre-discovery Indian's ability to imitate in copper what he already had before him in numerous forms as the equivalent of sockets of wood, bone, etc., apply. The argument that through centuries of life the Indian would gain a sufficient knowledge to do thus, or so, is a very different proposition from that other side which suggests the question, Did the American Indian do thus or so?

That holes were drilled in various substances cannot be doubted, but that when such holes were bored they were made for the purpose of binding appears only partially true. Mr. Boyle thinks much "of what has been said respecting the evolution of the socket, applies in a modified way to the nail holes in it," this argument appears to me insufficient. In an examination of Mr. Beauchamp's illustration of copper objects now before me, those without nail holes appear more ancient than those with such holes, and the objects with stems or tangs appear more ancient than either. One strong reason for this belief is that the stemmed type is much the most primitive.

It is conceded that it is quite easy to make statements respecting almost anything the Indian ever produced, but on the other hand, it should not be denied that statements are, or should be, weighed somewhat in reference to the experience of the individual making the statement.

That the American Indian possessed copper artificially worked, no one at all familiar with early American publications can doubt; that he beat and pounded it into sheets is equally true; but that the whites employed copper as one of the principal articles in traffic with the natives is undoubted, but barring the pots, shown to be commonly made of brass, there scarcely appears to have survived a single copper implement made from European copper. Is this not so?

In a recent discussion of this subject, with a friend, he suggests with much force that personal inspection is as valuable a test as any, and good illustration is often quite as valuable.



## WORKING METHODS.

## UNFINISHED STONE PIPES.

In figure 1 we have illustrated an unusually large, and otherwise peculiar specimen of what was probably meant to be a pipe-head. It was found on the farm of Mr. Leith, township of Binbrook, county of Wentworth, and was presented to the Provincial Museum by Mr. C. W. Hartman, of Cincinnati. It is of Huronian slate, almost seven inches in height, and four in breadth, having a thickness of an inch and three-eighths at the back of the upper portion, and thinning to seven-sixteenths of an inch near the lowest point.

The large size and corresponding weight of this object scarcely

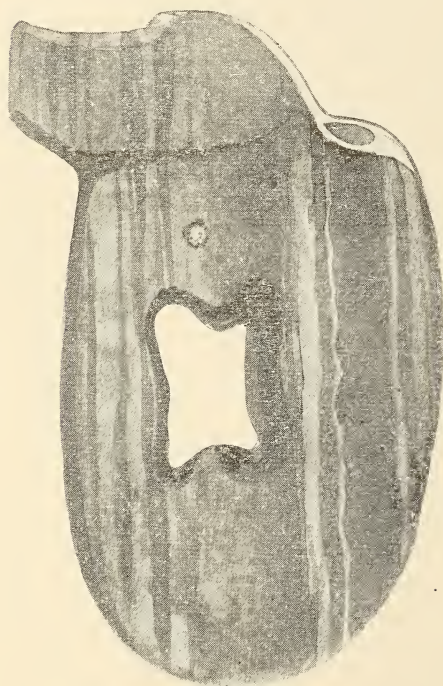
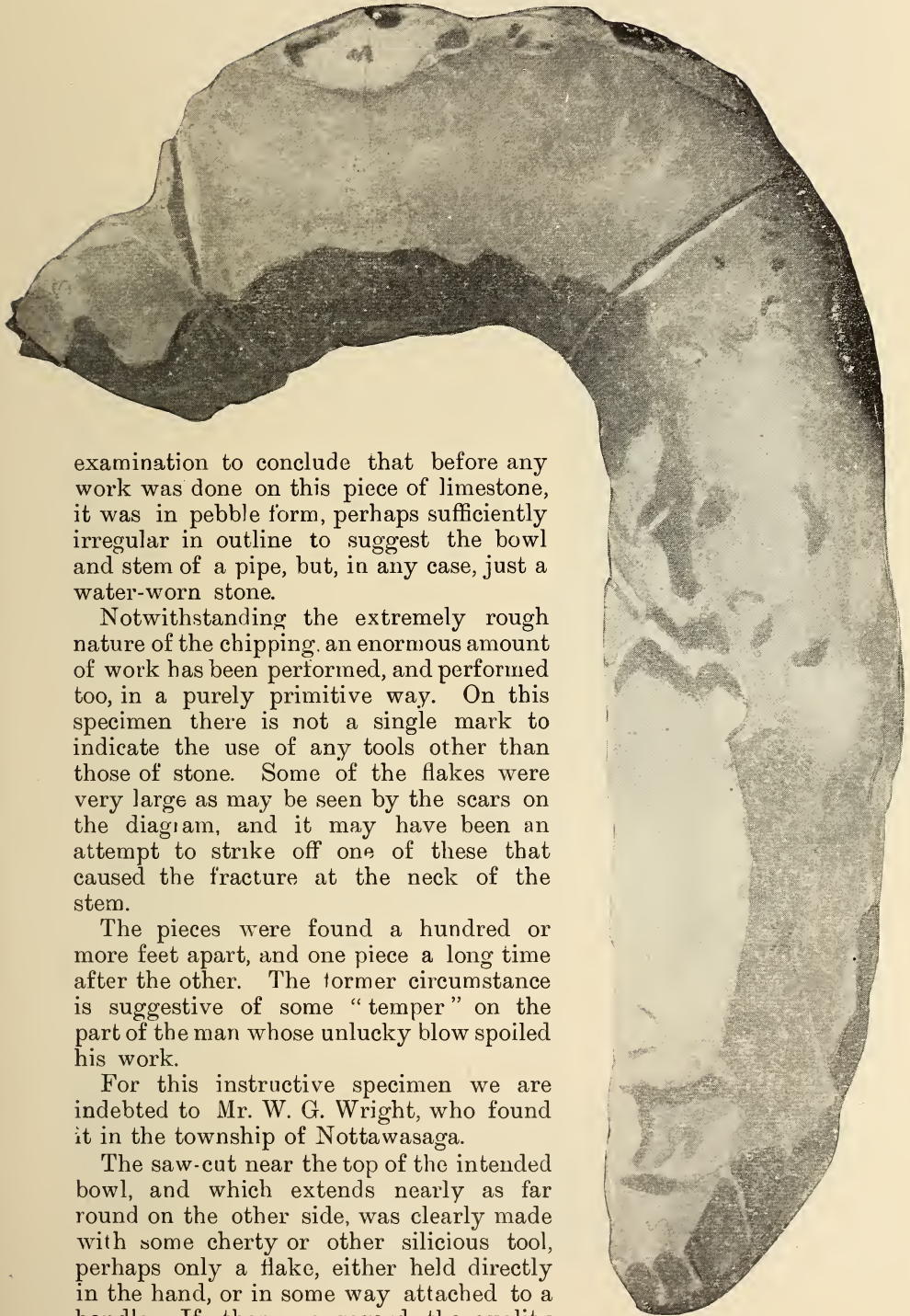


Fig. 1 (26,544)  $\frac{1}{2}$  diameter.

suggest its possibly intended use as a pipe-head. Another specimen (11,103) from the farm of Mr. A. Buie, in Notawasaga township, although somewhat less in size, possesses the same general character, and a finished pipe of monkey-like features (figure 28, report for 1886-7) from the farm of Mr. Findlay McCallum, near Milton, strongly resembles this Hartman specimen in outline. The three make a fairly good series, although differing considerably in size, and form a good illustration of what is well known respecting other examples of aboriginal handicraft, namely, that the whim, or caprice of the workman was largely governed by the size and quality of his material. For a long time there had been some doubt respecting the purpose for which 11,103 (figure 31 in the report for 1888-9) had been

made, as the work was not carried far enough to do any boring for the bowl or stem, but in the case of figure 1, the bowl-hole is bored to the depth of nearly half an inch. The beginning of another hole has been made by pecking, perhaps as a start for drilling, above the large orifice in the middle. Most of the surface is quite smooth, showing few tool marks of any kind.

There can be no doubt that this unfinished piece of work, figure 2, was intended to be a pipe, and there is just as much certainty that the workman's purpose was to model some kind of animal head on the edge of the bowl overlooking the stem. It requires only a slight



examination to conclude that before any work was done on this piece of limestone, it was in pebble form, perhaps sufficiently irregular in outline to suggest the bowl and stem of a pipe, but, in any case, just a water-worn stone.

Notwithstanding the extremely rough nature of the chipping, an enormous amount of work has been performed, and performed too, in a purely primitive way. On this specimen there is not a single mark to indicate the use of any tools other than those of stone. Some of the flakes were very large as may be seen by the scars on the diagram, and it may have been an attempt to strike off one of these that caused the fracture at the neck of the stem.

The pieces were found a hundred or more feet apart, and one piece a long time after the other. The former circumstance is suggestive of some "temper" on the part of the man whose unlucky blow spoiled his work.

For this instructive specimen we are indebted to Mr. W. G. Wright, who found it in the township of Nottawasaga.

The saw-cut near the top of the intended bowl, and which extends nearly as far round on the other side, was clearly made with some cherty or other silicious tool, perhaps only a flake, either held directly in the hand, or in some way attached to a handle. If, then, we regard the quality of the stone, the character of the work-



manship, the intention to make a carved pipe, and the design of forming some kind of figure on the bowl, we have all the conditions of a primitive nature that we may, and do usually, suppose accompanied a purely paleolithic method of working, and it is difficult to conceive an Indian workman proceeding in his simple way to form a pipe in imitation of some European model, as it has recently been asserted he did.

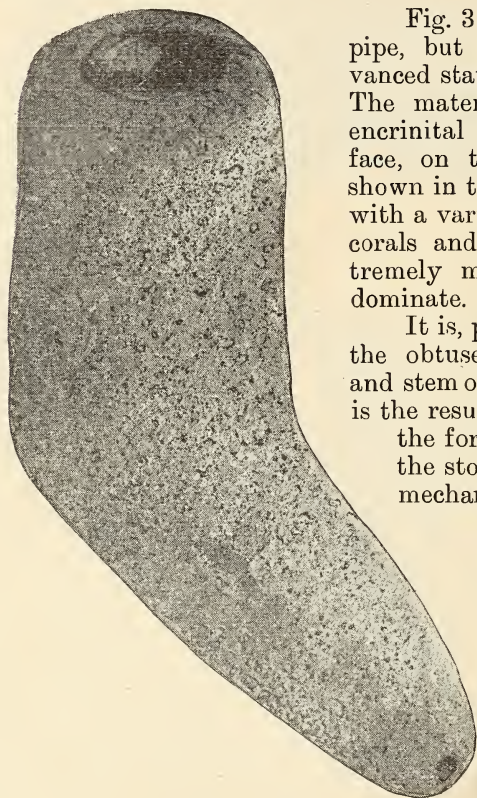


Fig. 3 represents another unfinished pipe, but in a considerably more advanced state than the one last described. The material may be referred to as encrinital limestone, the weathered surface, on the opposite side from that shown in the engraving, being covered with a variety of small fossils including corals and bivalves, among which extremely minute crinoid sections predominate.

It is, perhaps, quite safe to say that the obtuse angle formed by the bowl and stem of this yet unfinished specimen is the result of the workman adapting the form of his pipe to the shape of the stone, and this is such a simple mechanical device that it must have occurred to native pipe-makers long before they ever saw or heard of a white man. The bowl is bored to a depth of five-eighths of an inch, and a mere beginning has been made in making the stem-hole.

For this very excellent specimen, found on lot 6, concession 2, township of Malahide, we are indebted

Fig. 3 (24,833). Full size.

to our late friend, Mr. R. T. Anderson, whose untimely decease is elsewhere referred to.

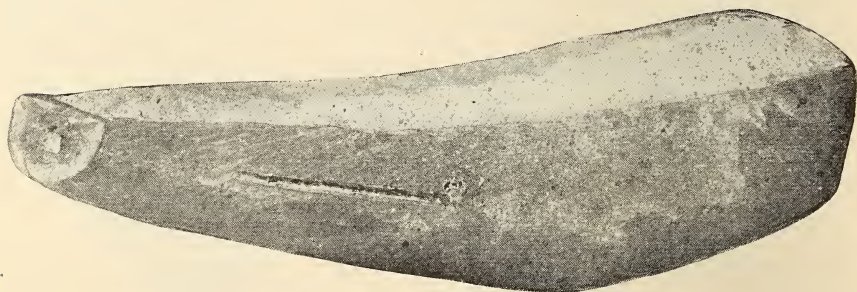


Fig. 4 (26,582). Nearly full size.

Fig. 4 has come to us since the general remarks on stone pipes were written. It is of soapstone, was found on the shore of Dalhousie Lake, Lanark county, and is presented to the museum by Dr. T. W. Beeman, to whom we are already indebted for a large quantity of material. The pipe, or rather what was intended to be a pipe, of which fig. 4 is a slightly reduced diagram, falls almost into the class of straight ones—those that are claimed to be of the oldest kind.

Without attempting to say just how old this specimen is, it may be mentioned that the greater portion of the surface has become patinated, and that it bears numerous examples of parallel striae such as it is believed may be the result of rubbing with other and grittier stones. A good example of these may be seen on the stem end of the diagram. The deeply cut line on the same side was plainly enough intended as a guide to the eye in boring the stem-hole. Examples of the guideline are found on some other specimens in the museum where the intention was to bore a long hole.

Fig. 4 is severely plain in design, but shows a good deal of skill in its almost faultless symmetry of workmanship.

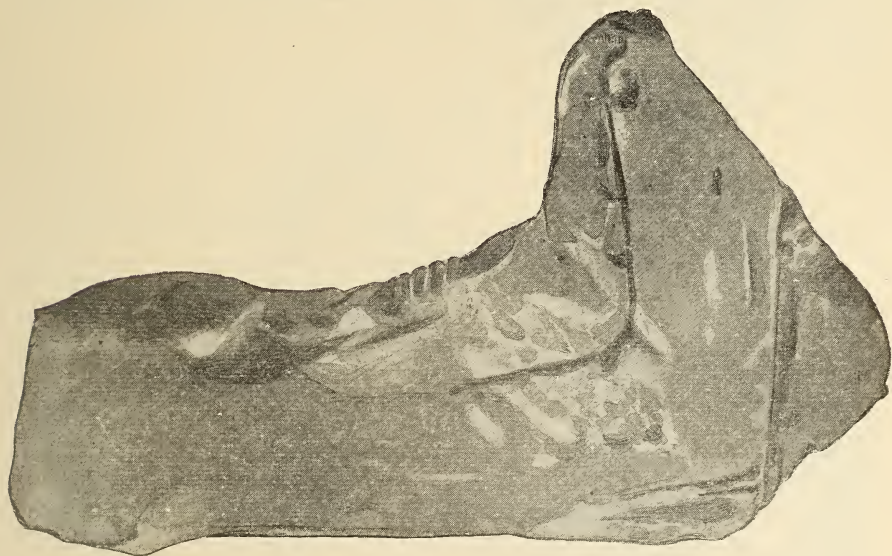


Fig. 5 (17,119). 4-5 diameter.

For the purpose of illustrating working methods, it might be difficult to find anything better than the intended pipe, fig. 5. The piece of soapstone may have been selected because of its suggestive shape, or merely on account of the fact that it was soapstone. Judging from the results of attempts to flake on the under side of this stone, the workman resolved to flake no more. He found his inability to regulate the size of his chips, and came perilously near ruining his material. He has done some sawing, therefore, to regulate the extent of the flakes, or, it may have been with the intention of carrying on this operation until such a portion as that which projects in front of the bowl was completely severed, or so nearly so, that it might be broken off with safety.



Having laid out the shape he meant his pipe to be, he feared to strike hard or heavy blows to remove the superfluous material on the upper side of the stem, and there he has notched the stone closely by filing with flint flakes, and then knocking off the weakened portions. The lower edge of the knob in front has been similarly treated.

On the side shown in the engraving several blows have been struck with a somewhat dull-edged stone axe, perhaps by way of testing the hardness of the stone before doing further work on it.

This specimen came from the Crawford farm, near Penetanguishene, and was presented to us by Mr. T. F. Milne, as part of the Milne collection.

#### FINISHED STONE PIPES.

During the past season, the museum acquired a collection made by Mr. W. M. Dick, of Brantford, near the boundary between Brantford and Onondaga townships. From numerous graves on lot 10, concession 3, Onondaga; a considerable number of clay and stone pipes was obtained, and some of the latter are here figured. Of both kinds there is a considerable variety, and many of them represent animal forms wholly, or in part.

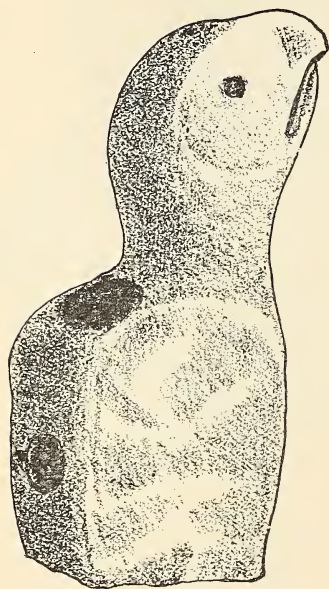


Fig. 6 (25,572).  $\frac{3}{8}$  diameter.

Figure 6 is made from gypsum and represents a bird form. The bowl hole is small when compared with the size of the pipe, and the stem-hole slopes upwards to meet it. The whole surface of this pipe has been well polished, but the side not shown in the engraving is somewhat weathered. There is another unfinished pipe in the museum made of this kind of stone.

Perhaps the creature intended to be represented on figure 7 is a lizard, but in support of this supposition there are only the elongated body and tail, and the whole may be merely a conventionalized form. The material is steatite of very poor quality, and so far as the workmanship is concerned there is nothing to indicate the use of any but primitive tools. The bowl is a flattened oval, the cavity of which is as smoothly finished as is the outer surface.

Numerous articles of white man's make were found associated with the stone specimens in these Onondaga graves, but unfortunately we now have no means of knowing whether the graves were all of one period, or of different periods, or whether each grave or only some of the graves contained objects of European origin.

Other pipes from the same burial places are illustrated by figures 8, 9 and 10, all of which bear marks that are usually regarded as evidences of European contact. These are of a soft white stone, scarcely any

harder than the indurated clay found near this city and used in the manufacture of coarse terra-cotta work. The origin of this material has long been a source of wonder to some of us, and I have for some time been inclined to regard it as stalagmitic.

Figure 8 has the longest stem of any stone pipe in our possession, its length being eight and a half inches, only about half of which is shown in the engraving. The sectional drawing shows the quadrangular shape of the bowl as seen from above.

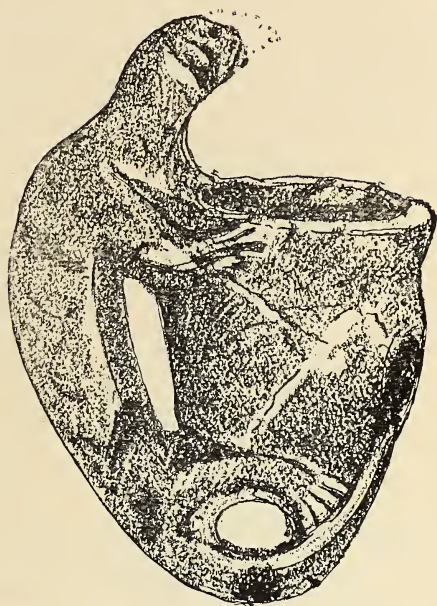


Fig. 7 (25,579). Full size.

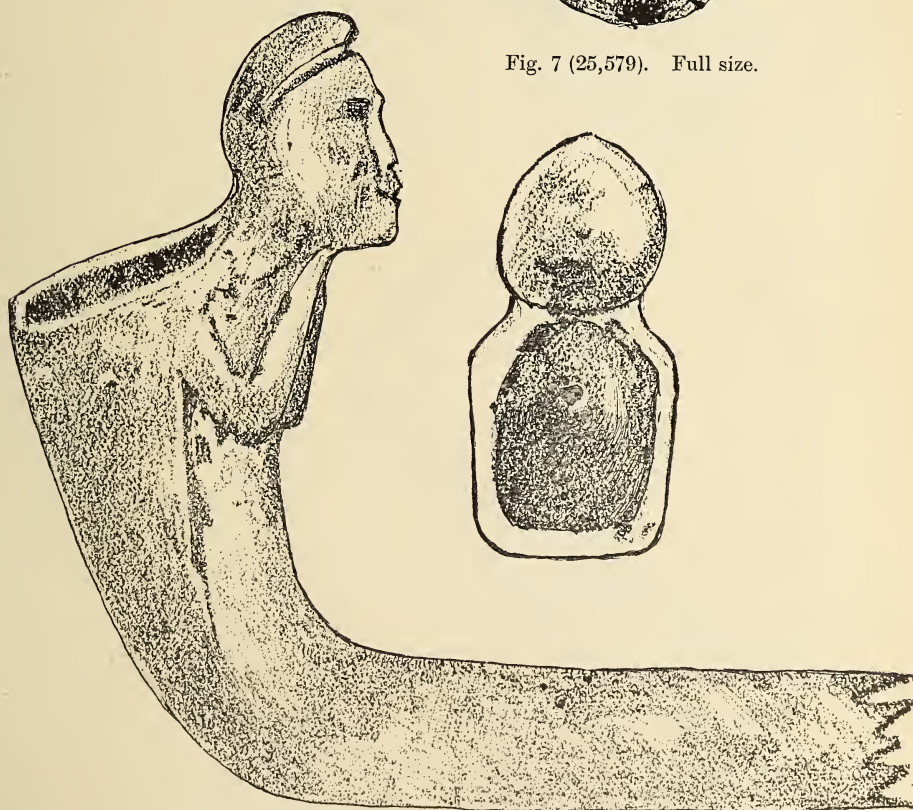


Fig. 8 (25,554). Full size.



Only the head and arms of the carving on this pipe have any human resemblance, and the latter are in a very unusual position, resting upon, or being pressed against the breast. Perhaps the intention was to make the head look as if being supported by the hands, but no hands are shown. The softness of the material may account for their disappearance, had they ever been represented.

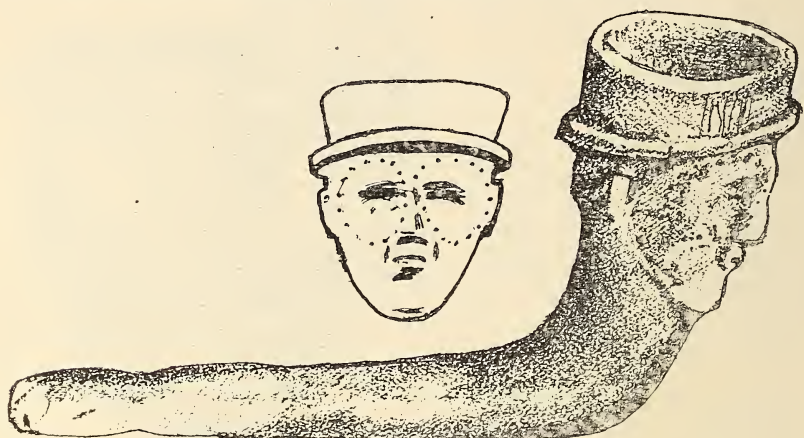


Fig. 9 (25,578). Full size.

One seems to see more of the European in figure 9 than in the preceding example. To some extent this may be owing to the head-dress, but a close examination of the workmanship points to a style

of art that is not Indian. This is most clearly observable when a full-face view is taken. Looked at in this way, too, it can be seen that although the workmanship may have been performed subject to white man's influence, the representation is undoubtedly that of some Indian, for, surrounding each eye is a circular arrangement of small dots extending from nose to ear, and from the middle of the forehead to the middle of the cheek, in outline, which, in all probability corresponds to the fashion of face-painting adopted by the owner of the pipe.

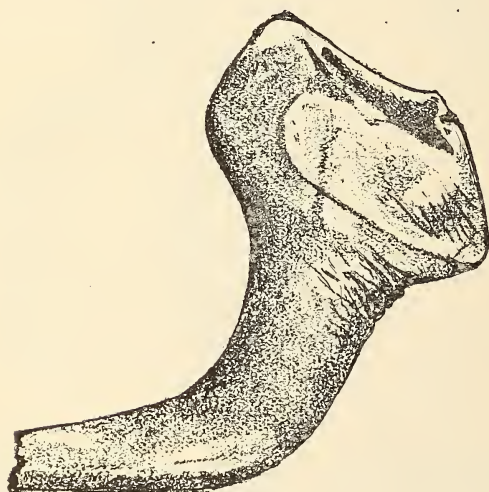
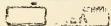


Fig. 10 (25,570). Full size.



AD19.

In figure 10 we see what has represented a bird of some kind. Little more than the wing shown on the engraving remains to testify, to the maker's design, unless it be a few lines indicating feathers at

the extremity of each wing. Imperfect as this specimen is, it would appear to intimate an art ideal somewhat beyond the Indians. In this specimen the stem is unusually short.

Of a very different style is the stone (figure 11) found at Lion's Head, Isthmus Bay, North Bruce. One is often at a loss to identify the kind of bird, or other animal which we see attempts to portray, but in this case it would appear safe to say, "This is an owl." The stone is slate, for the greater part, of a dark rich brown, but on the opposite side from that shown in the picture, a little more than the wing is of a pale, dull green. The workmanship is excellent, and the proportions are very good. The eye holes are bored fully an eighth of an inch in depth—deep enough to form a good seat for the insertion of any other substance to give expression as eyes to the figure, if any such intention existed in the mind of the maker. The end of the tail has either not been finished, or, if finished has been broken off, as it is still in the rough. In most pipes of this kind a hole is bored crosswise, through the feet, but sometimes perpendicularly, between them. A good example of the latter method is found in an owl pipe very much like this one, and which was found in Tiny township. It forms part of the Laidlaw collection. In figure 11, however, we have a compromise hole, the boring having been done perpendicularly from below half way through the projection that forms the feet, and another hole to meet it is bored from the side not shown in the cut. A little below the breast is a well-made line of serrations, the purpose of which is not very evident. The surface of figure 11 is not as highly polished as the surfaces of many stone pipes are, so that the scratches of the rubbing stone are still in evidence, and the word "rubbing stone" is used advisedly, for the reason that only one stone moved over another is capable of leaving such results as are apparent on the surface of this pipe, and this is the more remarkable on account of the fact that there are those who claim pipes of such patterns to be of unmistakable European origin, directly or indirectly.

Notwithstanding the generally bold artistic way in which figure 11 has been worked out, there is not a single feature of it bearing witness to the use of any but primitive appliances.

One of the prettiest little bits of primitive handicraft that we have in the museum is a soapstone pipe, figure 12 (26,604), recently received from Dr. T. W. Beeman. It was found near Dalhousie Lake, Dalhousie township, Lanark County.

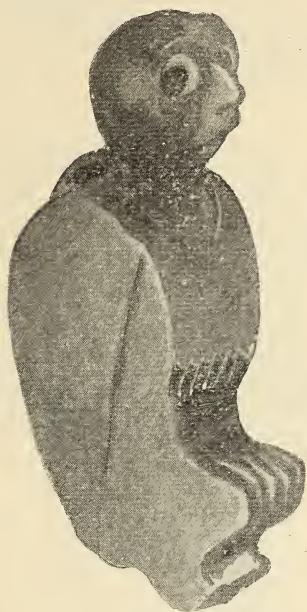


FIG. 11 (25,098).  $\frac{3}{4}$  diameter.



Small as this pipe is, the bowl is more capacious than many are of more bulky appearance, as the cavity is seven-eighths of an inch deep, and averages a little more than three-fourths of an inch in diameter. The wall of the bowl has been worked out to such a degree of thinness that portions of it are translucent. The stem-hole is very large—quite three-sixteenths of an inch in diameter. Although drill marks may be traced on the inner side of the bowl, some scooping must have

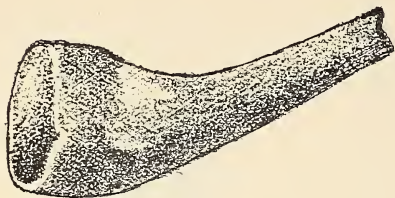


FIG. 12 (26,604). Full size.

been done afterwards, as the hole is not quite round

### CLAY PIPES.

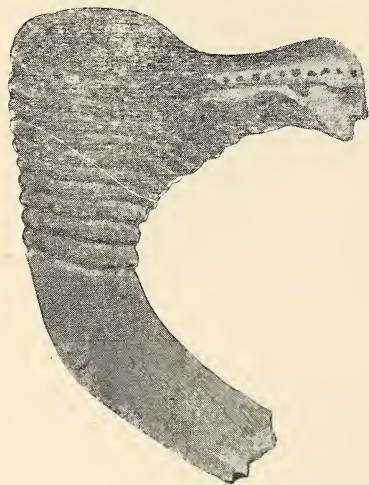


Fig. 13, (11,179). Full size.

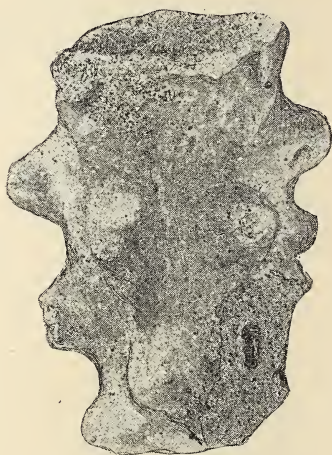


Fig. 14, (11,391). Full size

Figure 13 is of a pipe which ranks among the oddities of Tobacco Nation pipe-makers' workmanship. The craned neck, the simply conventionalized face, and the arrangement of lines and dots—all are unique in their combination on this specimen, while its general appearance is much more graceful than the illustration indicates. As is common, the head faces the stem, a somewhat strange notion on the part of a pipemaker, who, as some assert, was imitating or, was influenced by European examples.

To Messrs. William and David Melville, of Creemore in Nottawasaga township, we are indebted for this excellent specimen.

Perhaps the pipe bowl here figured (Fig 14) deserves notice on account of its originality in design, if it be not too pretentious to speak thus of what seems to be merely an imitation of an exceedingly coarse and knobby branch. The man who made it must have been an

"impressionist," among the Petuns, for, beyond simply trying to show that he could make something, he has put forth no effort to bring out details, or to give his work any finishing touches.

The raw material is tempered with burnt granite or gneiss, as is shown by the particles of quartz, feldspar and mica that appear on the surface, the two former only where there is a fracture.

This pipe formed part of the collection procured from the estate of the late Rev. J. W. Annis, who gathered nearly all his specimens in the northern part of the county of Simcoe.

For comparison with other clay pipes as to style and quality of work figure 15 is a very good example, as the surface has been stained a bright red, the whole of the forehead being yet so colored. The modelling is of the simplest kind, and yet the face is not without expression, which is mainly attributable to the peculiar way by means of which the mouth and eyes are imitated. Several examples of this device have been found in the province. By the method in question a slight depression is made with a bluntly pointed tool, so as to suggest in the one case lips, and the other eyelids. Unfortunately, the cheeks are so much injured that it is impossible to say whether this head was provided with ears. In one specimen, somewhat similar to this, there is not only a poor attempt to imitate ears, but there are holes at the lower ends as if to show where eardrops should hang.

This pipe was found at Price's Corners, Medonte township, North Simcoe, and presented by Mr. T. F. Milne.



Figure 15 (17,135). Full size

#### STONE AXES.

A large number of the stone axes and adzes we find are very roughly made, as if meant merely for work, without any desire on the part of the maker to produce a good or well-finished tool. In some instances it is plain that efforts have been put forth to show the old mechanic's taste and skill, and figure 16 pictures what is the most highly polished object of this kind in the museum. It comes from Elgin county, in the old country of the Neutrals, and from which many objects of unusually excellent workmanship have been procured. The material is of primary rock, very hard, and of a greenish gray color, mottled with spots of a darker shade.

It is astonishing how the belief has spread so currently in this province that all such specimens were used as "skinning stones." Next to arrowheads they are, among Indian relics, by far the most common, and it is absurd to believe that they were employed as the



popular name suggests. They vary in size from two to thirteen or fourteen inches in length, and in weight from a few ounces to five pounds.

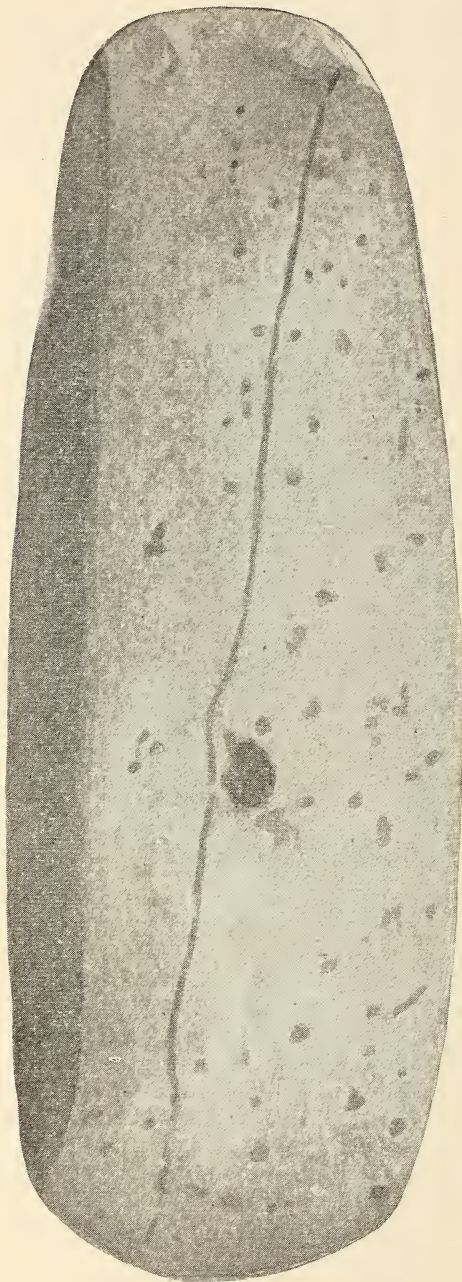


Fig. 16 (10,897). Full Size.

It is, therefore, evident that neither the very small nor the very large ones could have been used as skinning tools, and it would seem somewhat difficult to draw the line respecting those that are supposed to have been so employed. There is no doubt at all that a handy stone, of the kind in question, may be used effectively in removing a hide from a slaughtered beast, but so may many other stone objects, and so also may not a few that are made of bone. Butchers find their knife handles answer very well when the strong adhesions have been cut with the blades, but it is quite impossible to give any stone tool of this kind as good a cutting edge as is possible on a piece of flint or chert, and nothing can be more certain than that implements of the latter material were the true skinning stones. Indeed, it is most probable that any arrowhead available was so employed when the occasion demanded.

We have, in the museum, three tools from the New Hebrides, of the same type as those that are so abundant in Ontario and other parts of the world, and fortunately, these are connected with handles just as they are used at the present day by the natives of the islands named. Two of them are fastened adze-

wise to handles which are respectively eighteen and twenty inches long, with an elbow, and the hird is inserted in a cleft at the end of a haft three feet in length.

The latter is of symmetrical form; that is, both sides are equally rounded, but the former two are comparatively flat on one side and well rounded on the other, and it is the rounded side that fits against the handle, or which is the nearer to the workman when the tool is in use.

The similarity between tools of this kind, from many parts of the world, is so great that if by any means a number of representative specimens should become mixed, it would be a matter of no small difficulty—indeed, almost an impossibility, to assort them properly.

It may not be out of place to repeat here that throughout Europe specimens of this kind are yet found, and are known as Thunder Stones, the popular belief being that they have fallen from the sky as thunder bolts. Perhaps it is for this reason that we all use the word “bolts” when we speak of a lightning flash, especially when anything is “struck.”\*

#### SLATE KNIVES.

Slate has always been a favorite material with the Indians of Ontario for the making of certain kinds of tools and of what, in our ignorance, we call “ceremonial” objects. Occasionally, we even find an axe or a gouge shaped from it. Tools known as women’s knives are invariably made from slate. These are mainly of two patterns semi-circular, or crescent; and sagittate or arrow shaped. Eskimo women still use tools of the former pattern in the cleaning of fish, and in the dressing of skins. The largest specimen we have of the half-round type, about nine inches long and fully half as wide, was found on the banks of the Madawaska river, and was presented by Mr. Archibald Riddell, of Arnprior. The figures accompanying this note



Fig. 17 (17,142). Slightly reduced.

\* Since this was written, Prof. J. Walter Fewkes, of the Smithsonian Institution, has kindly sent me a copy of his Preliminary Report on an Archæological Trip to the West Indies, from which it appears that the Porto Ricans (mainly of Spanish origin) have inherited this old world notion.

On page 116, Prof. Fewkes says: “The celts are called by the country people ‘thunder-stones’ since they are believed to have fallen from the sky. Almost every household has one or more of these stones, which are thought to afford protection from lightning, or to be efficacious in the treatment of certain bodily disorders. The method employed by the natives to determine whether a stone is a ‘thunder-stone’ is to tie a string about it and put it in the flame of a candle. If the string burns immediately, the stone is not regarded as a true ‘thunder-stone.’”



represent the smallest of their kind in the museum. To most implements of this sort, it is probable that some kind of handle or haft was attached, as we know the Eskimo do with theirs. Figure 17, which is straight-backed, is thinned along that edge as if to allow of the blade being let into a slot in a piece of wood, and figure 18 is quite rough along the corresponding edge as if it, too, was meant to be covered with some sort of handle, unless we regard the specimen as an unfinished one.



Fig. 18 (3,760). Slightly reduced.

Our largest specimen, already mentioned, is so made as to leave the back considerably thicker than the blade, the division being marked off with a decided shoulder, and this thick back may have answered the purpose of a handle.

Another slate knife, but obviously deriving its form from that of the arrowhead is illustrated by means of figure 19, which was found at Rylstone, near the north-east corner of Northumberland County, and presented by Mr. D. Allan. It will be observed that this specimen is not symmetrical, but this is probably accidental rather than intentional, or it may be the result of wear, although we have several examples of small knives showing a decided purpose to make one side rounder than the other, and a few that seem to be intermediate in relation to the half-round and arrow-shaped forms, in which only one side has been brought to a cutting edge.

Before the days of specialization, an arrow-head may have served also as a knife, a scraper, a saw, and a drill. At any rate, the various chipped cherts we regard as having been so used seem to carry with them proof to this effect. Figure 20, from the County of Middlesex, Ontario, is (reputedly) a woman's knife in an unfinished state, as the edges are not sharpened, nor is the work on the shank completed.

Smaller specimens of this type are more common, and some have been figured in former reports. In more than thirty examples the edges are, without exception, more or less convex, differing in this respect from figure 20.

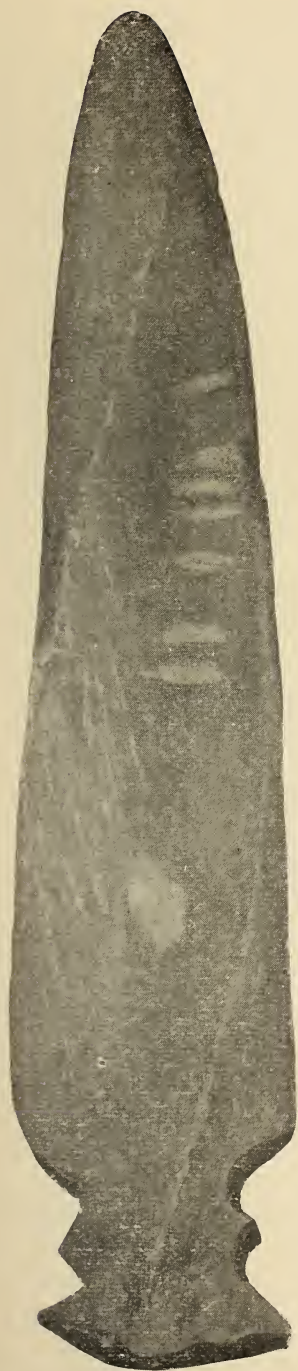


Fig. 19 (3,769). Full size.

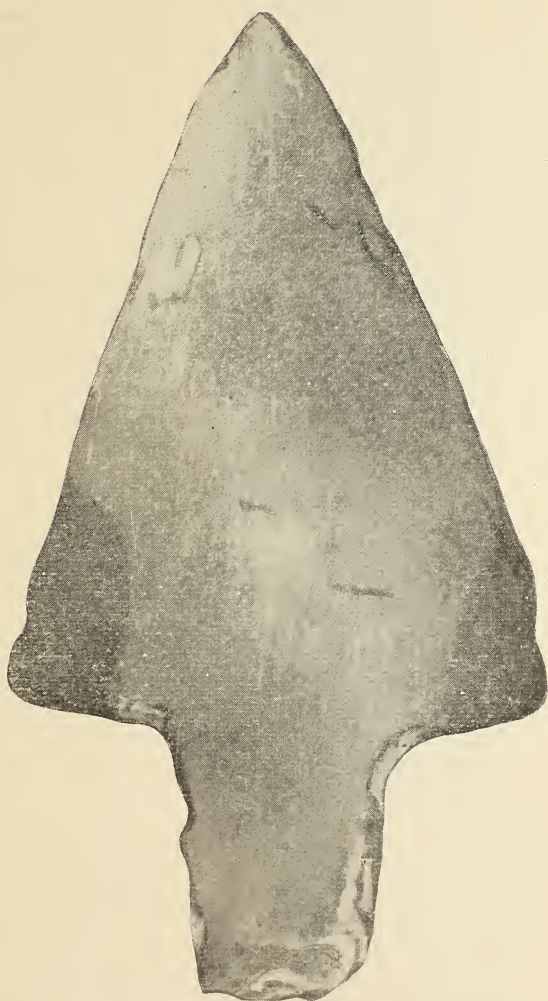


Fig. 20 (3,778). Full size.



## A SLATE PENDANT.

Of slate also, but for a totally different use is the object figured at 21. It was found at White's farm, South Yarmouth township, county of Elgin, and belongs to the class of object known as "pendants," and as the hole shows considerable signs of wear, the specimen may have been so worn, either by itself, or, as part of a necklace. For all we know it may have been attached to a waist-belt, or



Fig 21 (458). Full size.

have been a portion of dance toggery worn at the knee, or it may have possessed some talismanic reputation as part of a medicine man's outfit; we know not. The probability is that such articles were used as personal decorations in some way, and the ancient workman has apparently taken pains to shape this particular pendant in some conformity with the veining of his raw material, a piece of Huronian slate. When perforated slate specimens, from two to four inches long, come to a point at the lower end, there is good reason to regard them as having been eardrops. On more than one occasion I have found them in Iroquoian, or Huron-Iroquoian graves, so situated in relation to the skull as to make this probable. An excellent pair was found in a mound on Mr. C. A. See's property, on Tidd's Island, River St. Lawrence, some years ago, and we have added others since.

The pendant character of figure 21 may be assumed, not only on account of the hole, but from the fact, that while the maker has been at great pains to obliterate almost every trace of roughness on one side, the other side is much less carefully finished.

It may be noticed here that many more objects made from this striped slate are found in the south-western than in the eastern part of the province.

## STONE GOUGES.

Few stone tools attract more attention than is given to gouges, and when all has been said, it cannot be claimed that we know much

about them. I have no recollection of anything like them being reported outside of North America, and even here they are mainly, if not wholly, found in the valley of the St. Lawrence. Not many of these tools show any evidence that they were used otherwise than directly in the hand, although most of them are made much like the stone axes and adzes, and might have been similarly attached to handles. We have at least two specimens however, respecting which there cannot be a doubt as to their having had handles, or how these handles were fastened to them; and a few others bear marks that may also have been made in connection with some attachment of this kind.

Of about a hundred and fifty in the museum, two-thirds come from the Rideau Valley, in the greater valley of the Ottawa, and most of these differ in form from those found in the western part of old Ontario; the lips, or cutting edges of the former being flatter, and the sides somewhat shouldered as compared with more deeply and widely rounded hollows of western forms. Figure 22 illustrates one of the eastern type found near Lake Temagaming. It is of argillite, as many gouges are, and besides having the characteristic shallow and shouldered lip, is sharpened at the opposite end like an axe.

This quite uncommon form was found near Temagaming Lake in Nipissing District, and came to us through Mr. Aubrey White, Deputy Commissioner of Crown Lands.

The one shown by figure 23 is much smaller, and, in some respects, more accurately worked. It is from a section that has yielded nothing of the kind previously, and is interesting for this reason. For it we are indebted to Mr. Frederick Birch, of Wodehouse. The portion of the face above the hollow is quite flat, while



Fig. 22 (19,831).  $\frac{3}{4}$  diameter.



the back is rounded ; this, added to the fact that the head has been left rough, suggests that the tool was not used directly in the hand.

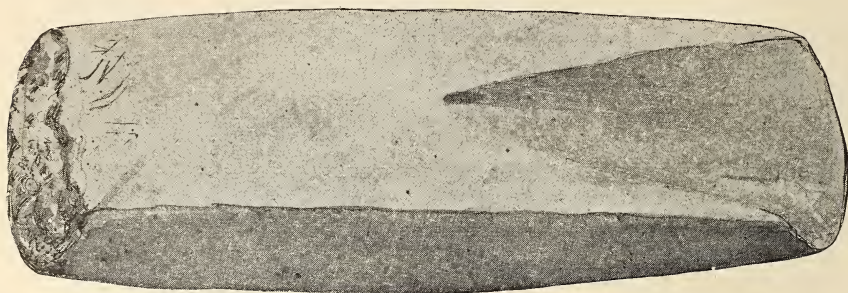


Fig. 23 (26,151). Full size.

Figure 24 illustrates the smallest gouge in the museum, but the engraving does not well bring out the hollow which extends from end to end of the specimen. The edge is ground to a chisel point. This very small tool comes from near Port Maitland, in Haldimand county.

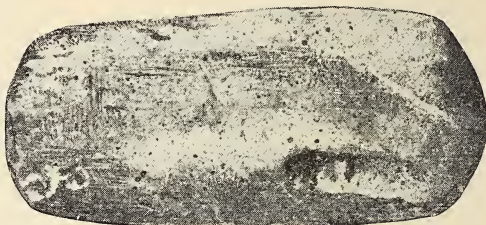


Fig. 24 (17,204). Full size.



Fig. 25 (5,088). Full size.

The tool (5,088), of which figure 25 is a diagram, was found by Mr. A. McCoy, in Drummond township, Lanark county, and is of the eastern Ontario type, but much flatter than most tools of this kind are. Indeed, it is nothing more than a small slab of slate, roughly rounded on the two long edges, and very slightly hollowed to form a cutting lip. Some of the scratches on the side shown are of recent origin, perhaps the result of using the stone as a hone, but the star-like arrangement of lines at the upper end, although seemingly much older, still have a modern appearance, the accuracy with which they are made indicating the use of a ruler or straight edge on the part of the man who made them.

The only use that suggests itself in connection with tools of this kind is, that of removing the charred wood from the inside

of dug-out canoes, or for a similar purpose in the making of wooden bowls. For the former use, a tool like figure 22 would answer very well, while one like figure 23 would serve admirably even when held directly in the hand, for the cutting away of charcoal from any small wooden vessel in process of making.

Nobody has yet suggested or insisted that the Indian never thought of such a tool until he had seen one in the hands of a French carpenter, but there is yet time, to show how utterly foreign the curved lip, and the whole idea of *gouging* are to the aboriginal imagination. It may readily be proved that half-round steel files were absolutely necessary to form the hollow!

Figure 26 is of a somewhat peculiar specimen on account of its having been degraded, or subjected to a secondary treatment, by which means a large por-



Fig. 26 (5,067). Half diameter.

tion of the hollow has been ground away not only at the lip, but for fully two inches back, as the cut shows. In its present form it was no doubt a very effective cutting tool, when attached to a handle, as the pecked hollow on the rounded side shows to have been the case. The gouge was found at McDonald's Corners, on Rideau Lake, by Mr. W. Dunlop, from whom it came to the Provincial Museum per Dr. T. W. Beeman, of Perth.

#### PEBBLE GORGET.

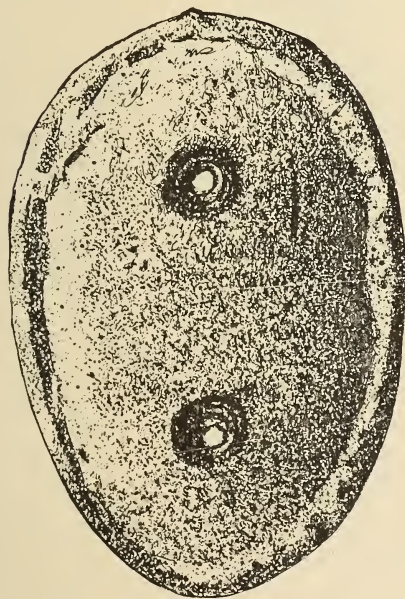


Fig. 27 (26,578). Full size.

Figures 27 and 28 are cuts of a somewhat peculiar piece of Indian work, found near Clarksburg, Collingwood township, county of Grey, and comes to us from Mr. Frederick Birch, of Wodehouse. It belongs to the class we call gorgets, although we are yet without any satisfactory reasons for so naming them. As has more than once been mentioned in our reports there was no regulation pattern for them—in a general way, they resemble one another, but the size and form were regulated mainly by the possibilities of the bit of slate or other stone in the workman's hands; indeed, it may be said that the shape of almost every primitive artifact is, to some extent, the result of such a condition.

It has frequently been observed that the savage was not at all  
5 AR.



slow in perceiving how the natural shape of a stone might be utilized and every museum contains examples of various kinds of tools and other articles, the idea of making which has been suggested in this way.

Figure 27 (26,578) is a very good example of this kind. Notwithstanding much that is artificial-looking about this specimen, besides the holes, it is of purely adventitious form. A well marked collar or flange borders the stone, as may be seen by figure 28, which shows a cross section. The holes are deeply countersunk, on each side.

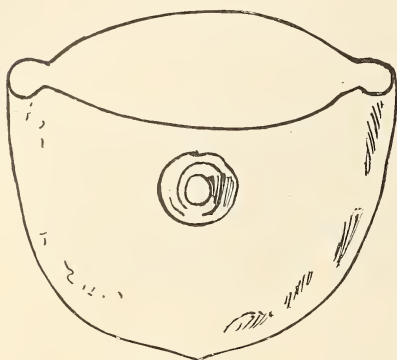


Fig. 28 (26,578).

appearance, as the fracture extends obliquely to the left, almost to the edge of the other hole on the opposite side.

#### HOW THE INDIAN MENDEO STONE.

Figures 29 and 30 illustrate very clearly an aboriginal device for holding together parts, of what we may suppose to have been valuable articles.

In figure 29 one of the holes seems to go through the crack in the specimen, but this is only in

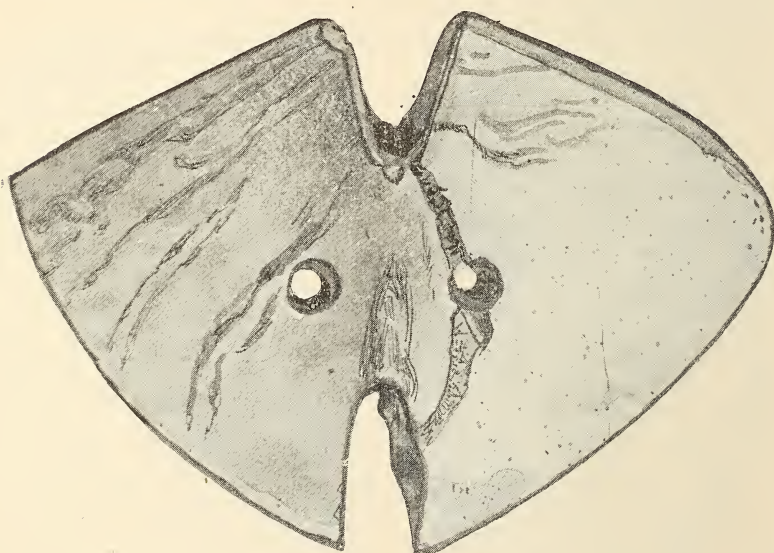


Fig. 29 (2,004).

We may surmise that the portions were bound together by means of a thong, probably of rawhide in a moist condition, so that when it dried the parts were drawn tightly together.

Be this as it may, the holes were for repairing or fastening purposes, just as is sometimes exemplified on pottery. Figures 29 and 30 have been chosen for illustration, because, so far as records show, there is not a single early reference in print to such objects which, perhaps, pertained to people preceding those we know anything about.

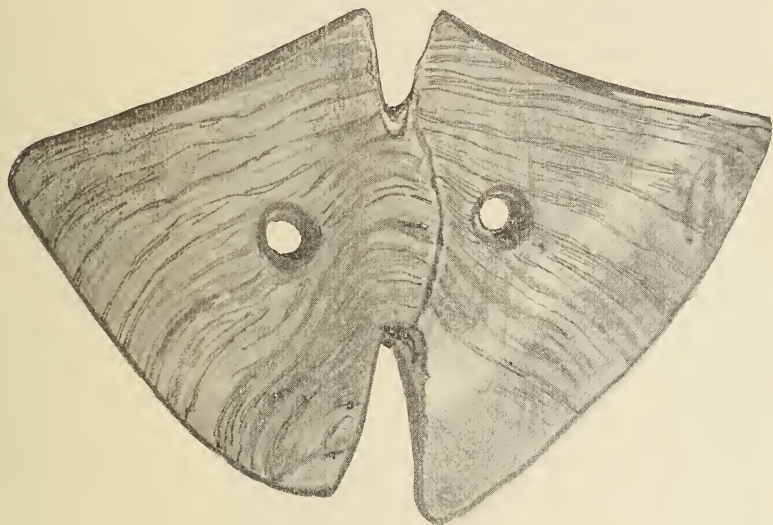


Fig. 30 (12,803).

#### STONE FILES OR STEEL FILES.

In much that has recently been written with respect to European influence on Indian handiwork, a good deal of dependence has been placed upon what were regarded as undoubted proofs that steel files and drills were used. Mainly, or largely on this supposition, the claim is maintained that numerous objects of good, bad and indifferent workmanship, hitherto assigned to purely Indian origin are nothing of the sort. As this matter is referred to elsewhere, in the present report, the purpose here is merely to examine briefly from a mechanic's point of view, what truth there is in so-called steel file evidence, as this is found on stone pipes and other articles usually called "Indian."

It is taken for granted by those who discover so much that has been produced by means of white man's appliances, that the deeply cut rings seen in stone borings, and the parallel striae observed on polished surfaces of stone are necessarily the result of steel tools having been employed. Confessedly, at first sight, such reasoning would appear to be correct, but in practice the results do not correspond with this conclusion, for it is quite easy to get from a steel file on a smooth surface, lines or scratches which are not at all parallel, and it is equally possible to produce tolerably parallel lines by the use of a stone file.





Every mechanic who has been taught to use a file properly, knows how difficult it is to overcome tendencies to the rocking and wobbling of his instrument—motions that give very unsatisfactory results, and tend to leave very confused striæ; whereas the steady motion of a gritty stone over the surface of a softer one will produce scratches with a parallelism that is surprising until one begins to reason the matter thus:—The most effective points in a stone file are the hardest and highest, or most prominent particles, which are usually of silicious character, and these, although occurring irregularly, produce marks quite straight and parallel, although not so sharp or so deep as if made with a steel tool, because the grains or particles often break down before the stroke, or push, or pull is completed, and as other grains are thus brought into play, the striæ are also less distinctly continuous.

Fig. 31. (Enlarged.)

During the last twenty or twenty-five years I have, at intervals, and as opportunity served or required, made experiments with metallic and mineral files on limestone, slate and soapstone, the kinds of material from which the Indian produced nearly all his finer specimens of work—that which, it is now claimed, he could not have accomplished without direct or indirect European aid, and I have found that when looking over the experimental pieces after the lapse of a few months, and when I had forgotten which was which, it was often difficult, if not impossible, to distinguish those that had been treated with a Sheffield “Sorby” from those that had been rubbed, stone on stone.

For this and other reasons it was thought desirable for the present report to take another piece of stone and do similar work on it anew. For this purpose a bit of hard, dark-grey, fossiliferous (probably Trenton) limestone was chosen, partly on account of its shape, from a heap of building material lying on the Education Department grounds. The rougher prominences were reduced with the assistance of a grindstone. With a fairly good file, borrowed from our carpenter, the results were as they appear at the top of figure 31. On the two lower portions a piece of coarse red sandstone was used.

The marks resulting from the steel tool are undoubtedly deeper, sharper, and more continuously parallel than are those made by the stone tool, but the statement is here ventured that the general appearance of the surface marked by the stone tool, especially in the middle portion of the limestone, so strongly resembles the work of the steel file as almost “to deceive the very elect.”

The results from a new file are not so good as those from one somewhat worn, because the most delicate points of the hard metal break when brought into contact with the stone much more readily than if rubbed over iron, and the results are more like the work of the sandstone tool on the middle and lower parts of the limestone in the figure.

### SOME MECHANICAL METHODS.

There seems to be a disposition of late, on the part of certain American archæologists, to regard the prehistoric Indian as a being of extremely low intelligence—only a few degrees, indeed, superior to some of the lower animals. It is conceded that he lived, and that he was exceedingly cruel, that he delighted in war, that in a very crude way he managed to produce a few weapons and utensils, but really was of little or no account as an artificer until after he came into contact with white men. By implication it is taught that not only was warfare chronic, but that every man engaged in it; that for a change he did something by way of hunting and fishing, simply that he might live; and that grossly superstitious as he was—as all savages are, and many who are not, even now—he lived the lowest kind of life, without inventiveness, or other kind of originality, and was utterly deficient in art instinct.



Ethnologically, however, we learn that he was a tolerably high type of savage. He possessed a considerable share of imagination—he peopled his universe with good and bad spirits, as well as with a multitude that were neither one nor the other—he attributed reason to everything having animal life—he feasted and gambled for divination purposes, if not for those of a worshipful kind—he loved finery—was given to bravado, and fond of story-telling—liked to make speeches—was extremely hospitable, and lived up to his tribal code of honor. From this unembellished statement of fact, it is easily deducible that he *was* somewhat originaive, which does not mean that every one was gifted with originality, any more than it would be true to say that every one of our superior selves is so blessed, or cursed, but it does signify that notwithstanding the simplicity of aboriginal tastes, and the rudeness of primitive society conditions, notions were “abroad,” and that here and there among the people real novelties arose from time to time. During the historic period we have had numerous notable examples of Indian intelligence in different departments of business life, and it can scarcely be that “no man of parts” appeared during prehistoric times.

Wherever he came from, he brought the knowledge of how to make a stone tomahawk and a stone arrow, we know not how much more; but we do know, that adapting himself to his surroundings he produced many other things that ministered to his wants, and that he was far from being too hide-bound in the matter of custom to refuse the adoption of what was novel, as far at any rate as his limited intelligence would permit, and it is exactly in this relation that even civilized races stand to their environment to-day. It is a question of degree, not of kind. But, in admitting that as a rule his wants were limited in accordance with his ideas, and his ideas in correspondence with his wants, we are not bound to conclude that either mentally or otherwise his condition was stereotyped. The archaeology of the Atlantic slope, to mention no other area, points to a very different conclusion, for here we find many samples of workmanship that differ totally from those found in any other part of the continent, or of the world. Some aboriginal genius must have cropped out now and again in æsthetic as well as in mechanic art. Our old savage knew what he wanted to make, and he knew, too, just the kind of material best suited for his purpose. With intelligence far beyond that of the eolithic stage, his eye was quick to seize upon any natural or adventitious form in wood, bone, or stone from which to produce desired results with the least amount of labor, and that his reasoning power exceeded that of paleolithic man, we have evidence to show in every private or public collection.

In Figure 32 we have an example of what may be called his adaptiveness. Here was a waterworn pebble with some resemblance to an axe, but it was lacking in symmetry. By means of persistent pecking with sharp and heavy fragments of harder stones the pebble has been reduced to something like the desired shape. The side shown in the illustration required fully twice as much work as the other side did, and consequently the waterworn polish is better exemplified on the opposite surface.

The excellent specimen of which figure 32 is a diagram, was presented to the Provincial Museum by Mr. Hugh Nichol, of Stratford, Ont.

Another of a similar kind is represented by figure 33. For

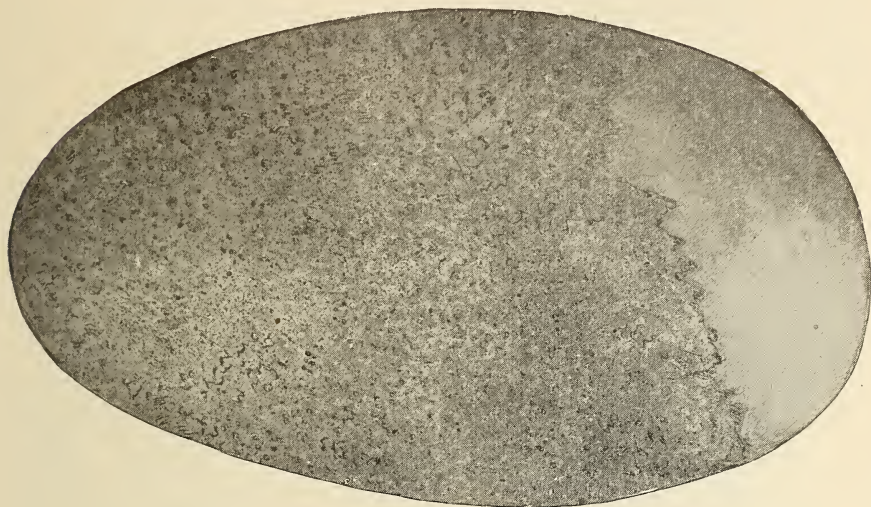


Fig. 32 (5,438).  $\frac{3}{4}$  diameter.

this example of pecking merely to remove a hump from what was also probably meant to be an axe, we are indebted to our very good friend Dr. T. E. Craig, now of Manchester, but formerly of Lawrenceburg, Indiana, near which city the original of figure 33 was found.

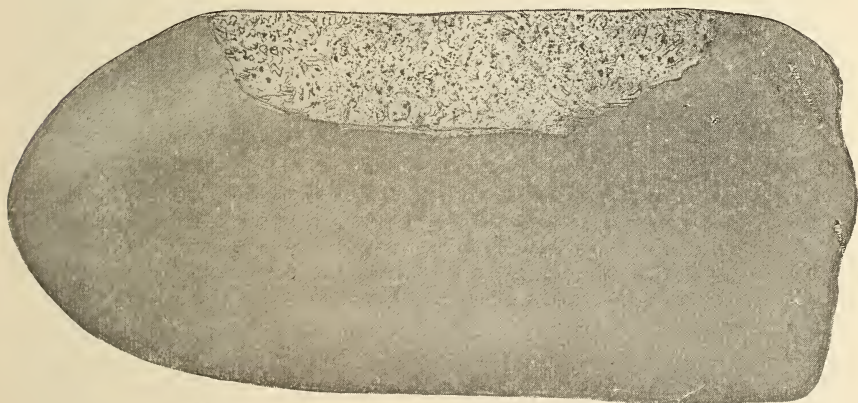


Figure 33 (5,436).  $\frac{3}{4}$  diameter.

In Figure 34 we have an illustration of another way in which reduction in size was effected. The stone was first slightly pitted on each side, near the middle, so as to be easily grasped between the



thumb and middle finger; sometimes the pitting seems to have been the result of using the stone first as a chipping-block. In either case, when it was afterwards used as a hammer the points of percussion would naturally be those which were most prominent. In this way a double purpose was accomplished, as also was the case when the pitting was the result of usage as a block. Some one (probably the late Mr. Frank H. Cushing) has suggested that discoidal stones were thus evolved.

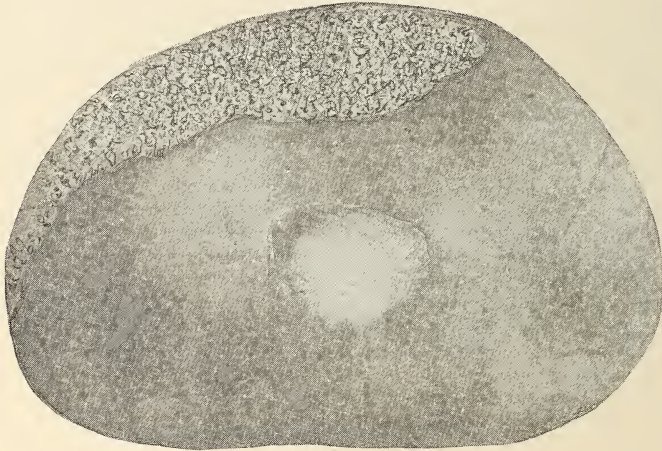


Figure 34 (12,427).  $\frac{2}{3}$  diameter.

Figure 34 came to us from Pennsylvania, through the U. S. National Museum.

Figure 33 is drawn a little more than half the diameter of a specimen which is a puzzle in methods. The material is argillite, and the object itself was found near Lombardy, Leeds county, a district that has yielded an unusually large quantity of valuable relics, most of which are now, thanks to Dr. T. W. Beeman, in the Provincial Museum.

Three sides of figure 35 have, one would suppose, been dressed. The one on which it rests, when looked at horizontally with the upper end to the right, is partly polished, while the unpolished portions look as if they had been treated with a saw, but the apparent saw-marks are rather what one would expect to see on wood. Marks of a similar kind, but even more distinct, are seen near the lower end of the diagram. On the shaded part, too, marks of this sort occur, but as the stone is slightly concave here, crosswise, it is quite evident that no tool of the saw kind, whether of stone or of metal, could have been employed; yet it is not easy to account for the regularity of the marks as a result of weathering, especially as they in no wise correspond with the terminations of the layers that characterize argillaceous rock. The likelihood is that the marks are the result of glacial action.



Fig. 35 (5,487).  $\frac{1}{2}$  diameter.



Fig. 36 (5,439). 7-12 diameter.



Evidences of these layers appear in the slightly curved diagonal lines on the right side of the illustration, and should be marked again on the opposite side, not on the side shown to the left.

In cross section this unfinished tool is rhomboidal.

Perhaps the specimen is simply an adventitious splinter of rock, the regularity of whose appearance has suggested the practicability of modifying it into a chisel similar to a few well finished examples we already have in the museum.

The specimen here figured (figure 36) is not only our largest example of chipping in the rough, but is one of the few examples we have of any attempt to make an implement from Utica slate, or shale, a kind of material one would regard as not being at all adapted for such a purpose. In the catalogue entry of this specimen, as recorded Nov. 7th, 1891, are the words "roughly, sawn and chipped slate axe," from which it appears that I regarded the diagonal, parallel, and somewhat deeply cut lines as resulting from the use of some sort of saw. I am now quite sure that these were not made in any such way, but are more like glacial striæ, as these may be seen sometimes where there is an outcrop of this formation. For it is noticeable, that soft as slate and limestone are in comparison with granite, diorite and other primary rocks, the ancient ice-marks can often be traced on their surfaces when there is not a vestige on the others, or, when, at all events, those on the latter are far less sharply marked. The marks also on pieces like this and figure 35 go to show that the material was taken from some surface exposure.

That the chipping is the result of handiwork there cannot be a doubt, but it is far from easy to surmise what possible use was intended for this tool. Apart from the frangibility of the stone, this piece is very much thinner on one side than on the other, in addition to which its very thinness gives a strong curve to the under side (as the diagram stands) thus rendering it difficult to understand how the finished implement could be put to any effective use. Not a tap has been made on the surface by way of pecking, and there is still some work that might have been done by means of flaking. It is twelve inches long, four inches broad, and averages an inch in thickness.

As a study of early man's workmanship, this specimen is one of the best in the museum. It was found on Rideau Lake, and was presented by Dr. T. W. Beeman.

Another very good example of rough chipping, and that, too, on stone of soft, argillaceous quality, is illustrated by figure 37 from near Carlisle, Ancaster township, in the County of Wentworth. It is not as long as the last described specimen, being only ten inches from end to end, but its width and thickness are respectively four and a half inches, and one and three-eighth inches.

The material lent itself admirably to flaking, and some of the spawls must have been very large; the scar of one measures fully ten square inches.

The style of notching in this specimen as well as in the one from Rideau Lake is restricted to Ontario and contiguous territory. Our Indians made the handle-grooves, wide, shallow, and all round the axe, or sometimes merely notched the edges, and almost invariably used



thinner pieces of stone than were chosen by more southern peoples, who grooved two sides and only one edge of their axes, performing the work, too, in a much superior way. It may also be noticed that in the latter the transversely, ungrooved edge is frequently grooved

slightly lengthwise, the intention being, as some suppose, to provide a good seat or bed for holding a wedge to tighten the head in its haft.

The unfinished specimen, two sides of which are here figured full size, (figs. 36 and 37) comes from the township of Humbers tone, Welland county, where it was found by Mr. Cyrenius Bearss, to whom the museum is deeply indebted for numerous gifts.

This piece of stone is almost jet black and nearly seven inches long, but of uncertain quality. Edgewise it is a little more than three-fourths of an inch in thickness, the sides being nearly parallel, but one much wider than the other. The remaining sides are irregular in outline. A have been more or less rubbed down to smoothness, most of the work having been done on the parallel



Fig. 37 (17,255) 3.5 diameter.

sides, and considerably more on the wide side than on the narrow one. Faint traces of parallelism in the striæ appear here and there, but nothing at all suggestive of a steel file.

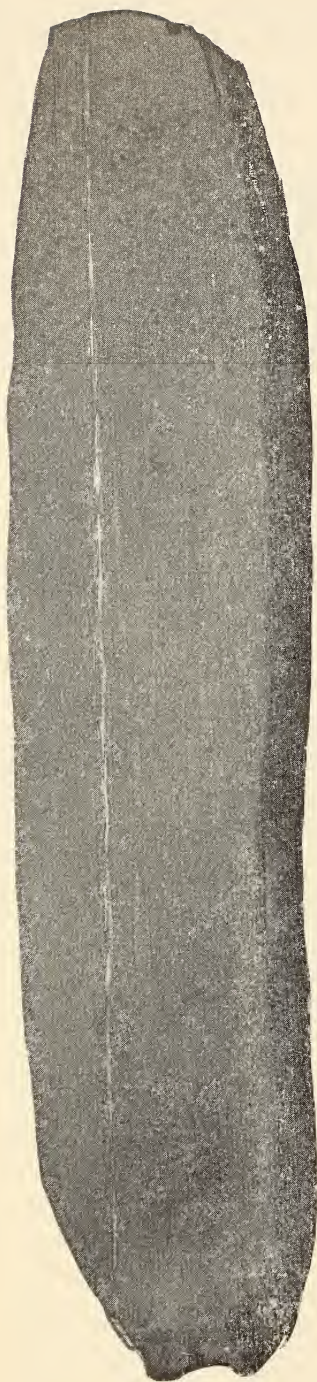


Fig. 38 (1,531). Full size.



Fig. 39 (1,531). Full size.



It is quite impossible to say just what this stone was intended to be when the work was finished, but whatever the purpose may have been, it was thought necessary that the sides should be straight. The one shown by figure 38 is already as nearly so as a plane could produce on a piece of wood. But the most striking feature of this specimen, and the one on account of which any attention is now paid to it, is the presence of a well marked line on each of the parallel and well smoothed sides, for the plain purpose of guiding the workman in bringing his material to the proper shape and size.

On one side (figure 38) the surface is so well rubbed down that traces of the line have almost disappeared, (they are much less distinct than as shown on the engraving) but on the side (figure 39) the line is still measureably deep, in some places not less than a thirty-second of an inch. In accordance with European methods, the workman would have simply scratched a line on the surface, or, desiring it deeper, would have cut it continuously with a sharp chisel, but this line is very roughly pecked, as if done by means of some sharp-pointed tool following a flint saw mark. Now, if an Indian laid out his work even in this simple way, it indicates the application of mechanical methods where we have been led to believe that only the "rule of thumb" prevailed.

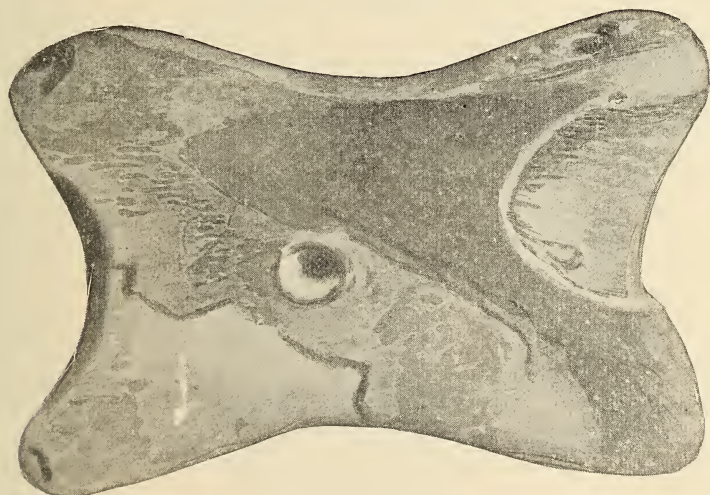


Fig. 40 (5,433). Full size.

We are as much as ever in the dark regarding the use of such tablets as figure 40, and which, by a tacit understanding have come to be known as "gorgets." In this province, nine-tenths or even a larger proportion of them, are made of slate, and as has been remarked on some former occasions, no two are formed alike. Among some hundreds we have only another specimen with four concave edges. It is not, however, on account of its shape that it has been chosen for illustration, but because of the condition in which the surface is, as a result of accidental flaking. Its appearance conveys the impression that during the boring process large pieces had scaled off, in consequence of which, the workman rejected it as being too thin for his purpose. In



an ordinary case, the stone might have been rubbed down into shape but on account of a wist in the material, such an operation could not have been successfully carried out, and the workman evidently discarded the piece altogether.

No attempt whatever has been made to bore from the opposite side, which has been rubbed, but not polished, as many gorgets are.

Parallel striæ, on hollow parts of the fracture evidently made before it was determined to throw up the job, follow undulations in a way that by no possibility could have resulted from the use of a file.\*

#### BONE AND HORN.

The largest bone awl in the museum is represented by fig. 41. It was found in the county of Ontario, by Mr. H. Pascoe, measures eleven and a half inches in length, and is well proportioned. Probably it was made from the leg bone of a deer, from which the piece has been sawn.

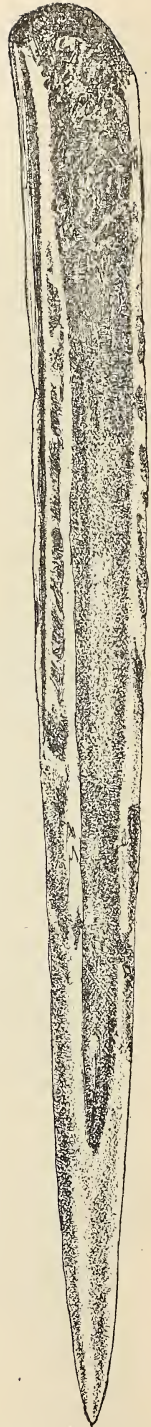
Tools of this kind must have been used in heavy work, such as perforating sheets of bark for wigwams, canoes and buckets. It is not at all unlikely that there were other uses to which these so called awls, or needles were applied, more especially the smaller ones. They may have been used as pins, or skewers, either for fastening clothing to the body, for keeping open or shut what served as doors to the skin and bark wigwams, or the women may have employed them in making the necessary attachments for carrying their papooses.

In former reports, specimens of the smaller kinds have been described and figured, of ornamental shapes, and bearing incised, decorative patterns.

A very fine specimen, only an inch shorter than fig. 41, and highly ornamented with straight lines, was found on lot 5, west half of concession 2, township of Bexley, and is in the Laidlaw collection.

\* "Amongst the earth which we cleared out of this chamber we found quantities of ivory, fragments of circular boxes, limbs, the hoof of a bull on a pedestal, fragments of utensils, and *tablets with holes through them*, probably for suspension."

From an article by J. Theodore Bent, in the *London Athenæum*, for July 6, 1889, on The Mounds of Bahrein. (The Bahrein Islands form a small group off the Arabian Coast, in the Persian Gulf). Similar tablets are found in Great Britain.



Figs 41 (25,155).  
 $\frac{2}{3}$  diameter.

Fig. 42 is not a very good drawing of what appears to be an abortive form of antler, the hole in which suggests that it was intended to be what is called an arrow-straightener, that is, a kind of "pinch" through which the shaft was pushed until it came to a bent or curved place, when the tool was used lever-like to bring it into line. Something of the same kind now, or until recently, used by some Indians in California lends color to the probability of this theory.

Perhaps the aboriginal eye caught the peculiarities of this antler—peculiarities that do not come out well in the cut, for it seems to have grown in an odd sort of independent way from the base of the main antler, a portion of which may yet be seen on the side of the specimen not shown in the diagram.



Fig. 42 (25,511). Full size.

The holes in such specimens are generally at an angle, perhaps as a result of the way in which the tool was used, the pressure and consequent friction wearing away two diagonally opposite sides,—one above and one below. As this tool does not possess the peculiarity in question, perhaps it had not been much used. It is from the Miller farm, Onondaga township.

The phalangeal bone here figured is from the Purdy farm, lot 5, concession 3, Brantford township. Bones of this kind, probably of the common deer are frequently found in ash-heaps connected with old village sites. Occasionally they show no signs whatever of work-

manship, but in other cases burnt marks appear on the ridge of the rounded or front surface. Marks so made are simply short bars extending crosswise, and vary in number from one to five or six, leading to the supposition that the bones were used in some kind of game—perhaps shaken and thrown as dice, or in some such way as the peach-stone or plum-stone game is now played among the Iroquois, namely, in a shallow wooden bowl as is described on pp. 126-8 in the Ontario Archaeological Report for 1898.

Bones of this kind are occasionally found with the flat side rubbed smoothly down as is shown by figure 44.

Fig. 43, however, differs from those on which bars have been burnt, in having the cross lines cut with some sharp tool, and in having no fewer than eight marks along the ridge, and quite as many on each of the two sides, although the arrangement is much more irregular on one side (the shaded side in the cut) than on the other. The whole appearance of this specimen is suggestive of its having been used as a tally, or counter, rather than as a die.

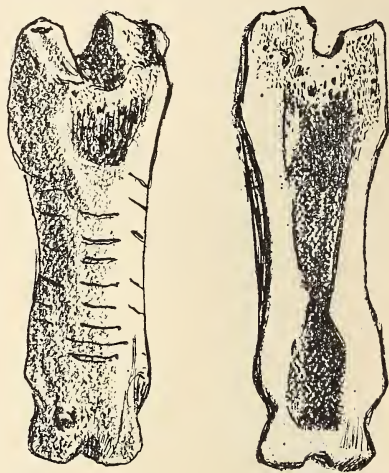


Fig. 43 (25,532). Full size. Fig. 44.

#### WHO MADE THE BONE COMBS.

Among people of almost every degree from the savage upwards the hair has been an object of solicitude as well as of pride. A volume might be written on its treatment in accordance with tribal and national methods. In the very lowest conditions of human society we may take it for granted that the fingers alone were employed for disentangling the locks, and for the removal of foreign substances and vermin. In more advanced conditions these operations were performed mutually as a matter of friendship, of ceremony, or, of necessity. Perhaps a thorn, a pointed stick, or a splinter of bone was found useful in "redding" the hair, and it may be that this usage, or the employment of two or more such objects in a bundle, gave rise to the idea of a comb, if, indeed, the suggestion did not come from the fingers themselves. However this may have been we find combs of wood, of horn, or of shell among primitive peoples in one part or another of the world.\* Some of the shell combs with comparatively broad, triangular or saw-like teeth, may have been employed to press the woof in primitive looms, as the Navaho women do at the present time with coarse wooden instruments. Although it is probable that the combs were made by the men, it is equally probable that they were mostly

\*In the Provincial Museum we have samples of bamboo combs from the New Hebrides, one has only two prongs, and one has seven. These are somewhat clumsily made from the solid; but from Loango, West Africa, are specimens having as many as fifteen prongs, or teeth, each of which is an independent slip of bamboo; and all are bound very artistically to form a complete implement.



used by the women. It is asserted that no Indian ever used a comb, and therefore never made one, until he got the idea from white people! and in evidence of this, reference has been made to the human and other animal figures that are carved on many of the specimens.

In the State of New-York a larger number and a greater variety of bone combs have been found than in Ontario. In *Bulletin* 50 (March, 1902) p. 284, Dr. W. M. Reauchamp describes and figures about twenty objects of this kind. In his opening remarks he says:—"The Indian use of bone combs seems not very old, and yet is prehistoric in a sense. Most of those found are of the seventeenth century, but some seem a few years earlier, suggesting a knowledge of Europeans without direct contact. The early ones are very simple in design, and with few but strong and large teeth. They are almost entirely confined to Iroquois sites, or those classed with them." On the previous page he says, "Artistic results in bone carving could hardly be expected before the Indians had metallic tools. So, when a well worked face or head appears, it is natural to infer the use of these, on what seem prehistoric sites." I am extremely sorry to differ from Dr. Beauchamp in his conclusions. There can scarcely be doubt that European contact and the use of metallic tools exerted strong modifying influences on old time, Indian mechanical methods. We cannot suppose anything more reasonable than this. It has always, and everywhere been so, under similar conditions. The Black Fellow of Australia could, and did, make a better boomerang with a Sheffield "thwittle" than by means of only a few bits of stone and shell. The Maori was able to produce a carved war-club, or paddle, with much less difficulty after he procured one or two steel tools than when he was confined to the use of obsidian or jade chips. The Fijian with a saw and a chisel made ten beautifully carved bludgeons in less time than it took him to make one in the old way. The West African negro to-day executes marvellous designs on elephants' tusks much more quickly than he could when his blade was only a bit of native-made iron; and the Indians of British Columbia carved immense canoes and totem-posts more quickly after Vancouver left them a kit of carpenter's tools. But boomerangs, and carved war-clubs, and paddles, and elephant tusks, and totem-posts did not owe their origin as implements or as works of art to European contact; indeed, when a comparison of results arising from old and new methods is made, it is not seldom to the disadvantage of the latter. Why, then, do we hear so much about "European influence" in this part of America in connection with any object of hitherto supposedly Indian origin, which shows the least evidence of superiority in workmanship, while we have no difficulty in conceding a large amount of innate mechanical and artistic genius to peoples afar off? Does it ever occur to those who attribute so little credit to our Iroquois and other eastern Indians to wonder why they should have proved such apt pupils as imitators and modifiers of European models, and yet be totally unable to originate a single idea beyond the most commonplace, apart from outside inspiration.

It is not quite easy to decide just where Dr. Beauchamp would place bone combs in point of time. "The Indian use" of them, he says, "seems not very old, and yet is prehistoric in a sense." What

this "sense" is we gather from the following sentence, which states that although most of the comb specimens found are of the seventeenth century, "some seem a few years earlier, suggesting a knowledge of Europeans without direct contact." This looks like a case of special pleading. It might be difficult to find a more painstaking and conscientious worker than Dr. Beauchamp, but here he shows extreme reluctance to credit the prehistoric Indian with intelligence enough to produce so simple a thing as is suggested by one's fingers, while at the same time the whole case is given away in the statement that "the early ones are very simple in design, and with few but strong and large teeth." This is the very kind we would expect to find. An object with fewer than three teeth we might hesitate to call a comb. Dr. Beauchamp figures six of what are presumably the earliest forms, all of which, probably—five, certainly—had originally four teeth. Is there here any confirmation of the idea that the hand may have suggested the comb? In any event it would not seem to have been at all necessary for the Indian to wait for centuries combless, only to find out how desirable a thing a comb was by learning in some way that Europeans used combs.

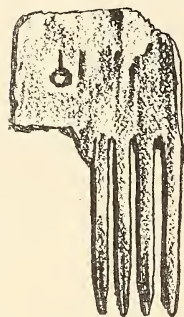


Fig. 45. (25,486). Full trade would not  
size. the inference be

that the use of them was previously established among the natives either for ornament or for use?

It would seem also as if we were unwilling to believe in the likelihood, or even the possibility of excellent work being accomplished without the use of metallic tools, notwithstanding what is known as to the expertness of many savage folk who were entirely confined to the use of only the most primitive appliances.

The specimens here illustrated came from what is known as the Walker and Sealey farm in Onondaga township, and were found by



Fig. 46. (25,482).

\* Figures 186 and 187, plate 18, and 196, 198, 199, and 200, plate 20, in "Horn and Bone Implements." It may be merely a coincidence that three coarsely made, and apparently old, combs in the Ont. Prov. Museum have had eight teeth each: two hands?

Mr. Walter M. Dick, of Brantford. Figures 45 and 46 are apparently of an earlier date than are those represented by figures 47, 48, 49, 50 and 51. They are not of the earliest type figured by Dr. Beauchamp, and which in our cases are exemplified by figures 588, 589, 590 and 8,071, all from the same locality as those figured in this report.

Figure 45 is very small. It probably had ten or twelve teeth if we may judge from the position of the suspensory hole. The teeth are very well finished, so well, indeed, that one might very readily suspect the use of metal tools.

A similar statement as to means of production might be made regarding every other specimen having enough of the teeth left for examination. The cuts appear to be so cleanly, and in some cases, so closely made as at first to suggest the use of a fine saw, or of a file, but when examined from a mechanical standpoint, one can see that neither of these tools could have been employed. A file would have

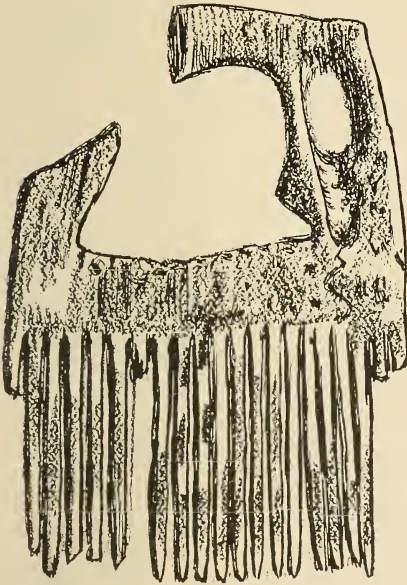


Fig. 47. (25,481). Full size.

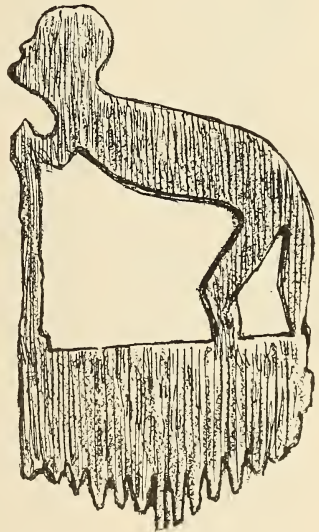


Fig. 48. (25,483). Full size.

separated the teeth at the very point only, and produced at the same time, a cut extending far beyond the intended head, or base of the tooth, while a saw would have left traces of its work in the squareness at the termination of the cut. Next to a thin, sharp flake or blade of flint, or of chert, a good jack-knife would prove most effective in the making of teeth in a bit of bone, and it may be that this handy pocket instrument found its way among the "red-skins" at a very early period. Apart from the teeth, the carving on figures 47, 48, 49 and 50 might have been done by means of a good "Jacques de Liege," or as it was once called in Scotland, a "jocteleg."

Unfinished specimens are nearly always of great value in affording hints or clues with respect to working methods, and among the



combs in this find we are fortunate enough to have one barely half made, figure 51. The bone which is about three-sixteenths of an inch thick, and slightly curved in cross section, is sharply shouldered down, about an inch and a quarter from one end, for the toothed portion, which is thus reduced to barely three lines in thickness. On the side not shown in the engraving all the teeth are cut down to the proper depth, but as may be seen, the work is incomplete on the side shown in the diagram. On account of the shoulders already

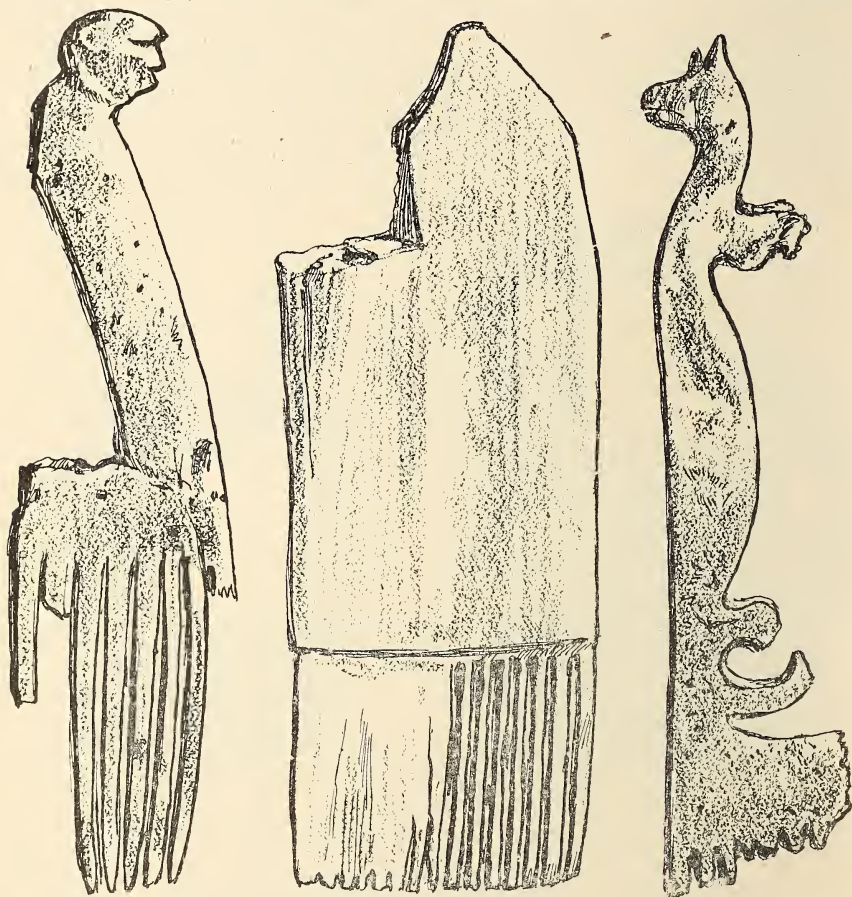


Fig. 49. (25,484). Full size. Fig. 51. (25,480). Full size. Fig. 50. (25,485). Full size.

mentioned at the base of the toothed portion, it was impossible to use a file, and the unfinished work shows that no saw had been employed. The work is rudely enough done to have been performed with "flints," but a steel knife was probably used. The appearance of the cutting at the shoulders would also lead to the supposition that such a tool was employed, but this only goes to prove that the makers of these combs simply availed themselves of a white man's appliance to produce articles of this kind more readily, and, perhaps more accurately, than they had been able to do in the old fashioned way;

and it would seem somewhat extraordinary to conclude that the Indian took to the making of combs simply because he had procured a white man's knife.

Having sent a copy of these notes on bone combs to the Rev. Dr. W. M. Beauchamp, he has kindly responded in vindication of his opinions as expressed in Bulletin 50. As he says we "want facts only" and I am not at all anxious to maintain any attitude in opposition to them. The discussion may lead to good results. In any event, great weight should be attached to statements from such an excellent authority as he is. Dr. Beauchamp's reply follows this.

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### BONE COMBS—A REPLY.

*By Rev. Dr. W. M. Beauchamp.*

I am glad you sent me your notes, for I would not like to go on your record as one who uses "special pleadings." I shall stand by my words, "not very o'd, and yet is prehistoric in a sense." Also, that (of the 17th century) "some seem a few years earlier, suggesting a knowledge of Europeans without direct contact." This is literally true. For example, the "Atwell site," from which fig. 199\* came, was occupied about 1600, partly determined by connection of relics. From this came the bone fish-hook, fig. 214, decidedly a white man's pattern. On the same site I dug up a polished shell bead, undoubtedly made with metallic tools. From the same site as reported I figured, but only mentioned p. 185, "a plain double comb," but doubted the location. This was certainly made with metallic tools. I have recently figured aboriginal combs from the same place. This site is "prehistoric in a sense," no European articles having been found, though its approximate age is clear. Its pottery, etc., closely connect it with the site near by (about three miles), where fig. 196 was found, much like the last. This site has abundant European articles. While one site is clearly on the 17th century, the other may be a few years earlier. No earlier combs have been found in Onondaga county.

In Montgomery county (Mohawk sites) no very early combs have been found; all are of the 17th century. Fig. 187 is "from a recent Mohawk grave" having European articles.

Fig. 198, from Herlock lake, I judge to be of the 17th century from the character of the clay pipe and bone ornament found with it. I had only a photograph of these.

The crucial test may be in Jefferson county, near Watertown, easily influenced by French trade at an early day, without direct contact. I have always considered that region the origin of Onondaga migration, without the full proof that I desired. As you will see, two barbed fish-hooks have been found there, certainly suggestive in point of time. I have seen several bone combs, all of the ruder forms;

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\*The references made by Dr. Beauchamp to figures and pages are in connection with his Bulletin 50, Horn and Bone Implements, one of the very excellent series prepared by him, now being issued by the New York State Legislature.

fig. 186 is one of these. They were made with primitive implements apparently, but one the owner would not let me even touch. They are unusual there. The point is *when* they were made.

On Iroquois' sites, early in the 17th century, is the peculiar pottery having human faces or figures. In Jefferson County, where conventional faces abound, I have had fine opportunities for studying the evolution of these, and at last found the true face, but not on a village site. At my last visit, a few days since, I found a face from a village site identical with the Onondaga pottery; *even more than this*, from the same village came a cylindric bead of rolled *European copper*. So I have good reason to say that while no Europeans reached Jefferson County in the 16th century, their ornaments did, and may have influenced Indian art.

To recapitulate: In all the State of New York no instance of a bone comb has been reported earlier than about the year 1600, except in Jefferson County. I think I have seen three from there, my notes would show if desirable, and the Jefferson county sites are now brought down to the last half of the 16th century. Definitely, I have no extra reluctance "to credit the prehistoric Indian," etc., but I do not not believe any New York or Canadian Indian ever made a bone comb until he had European hints. There is not the slightest evidence to show he ever did; the proof is all the other way. It is not a question of what might have been, but what *was*. I do not think it was "at all necessary for the Indian to wait for centuries" for bone combs, but he evidently did. I do not think the case in the least "given away" by any statement of mine. The early combs were simple for lack of tools, and the Indian did the best he could with those he had. As soon as he had saws, teeth and ornaments multiplied. I hope the case is clear. One of the combs I figured antedates the year 1600, according to my judgment, but falls within the 16th century, and this is the oldest known. Another approximates the year 1600. *All* the rest, simple or ornamental, are of the 17th century. I have written thus fully because I do not wish to be misunderstood, and don't want you to get into a wrong position, but I know you want the facts only. I do not, of course, believing that the Indian had his idea of making a comb from European examples, attach any importance to the *hand* idea. To me it is simply a question of how a desired result could be reached with the means. How large a bone can I easily work? How many teeth can I make with my tools? Beyond that you will readily see that, like our back combs, the intent was more ornament than use.

Yours truly,

W. M. BEAUCHAMP.

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## A SHELL NECKLACE.

In figure 54 we have an example of overlapping in point of time, as well as in workmanship. The necklace, which is wholly of shell, came to us through Dr. R. W. Large, who found the parts on the farm of Mr. R. Garrow, in King Township, York County. The information respecting the circumstances of this find is not as explicit as we could wish. As a matter of course there was no string or

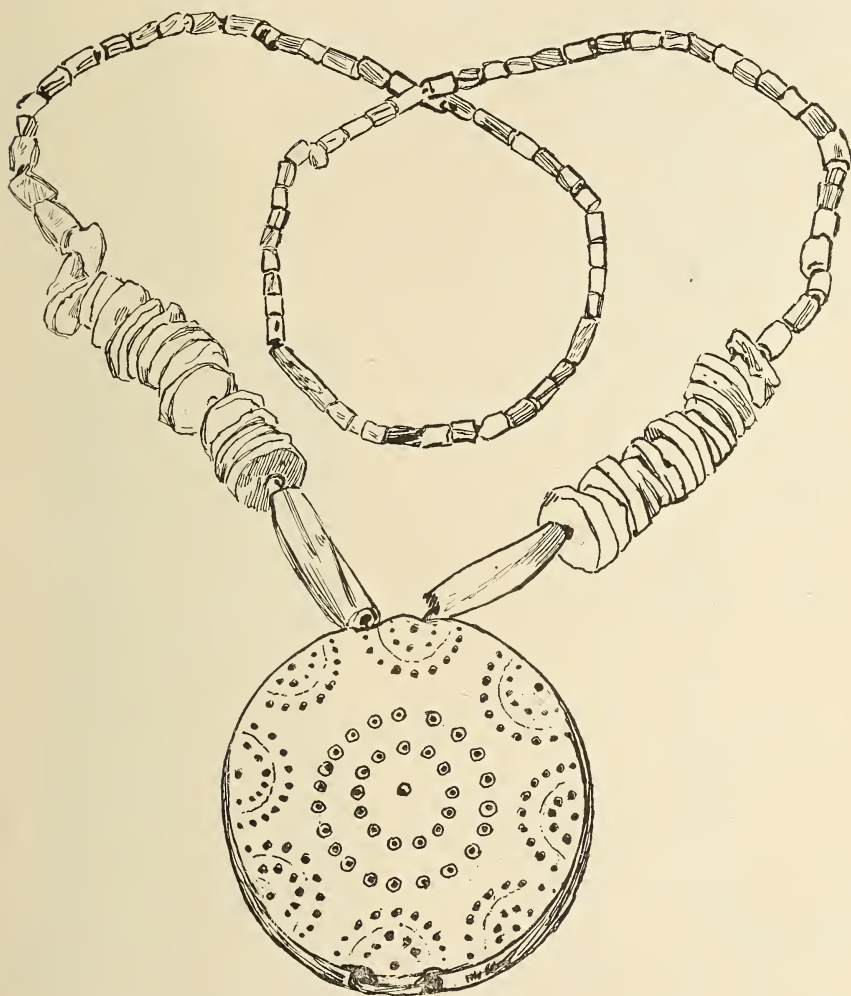


Fig. 54.  $\frac{3}{4}$  diameter.

thread connecting these when they were found. Indeed we are not quite sure that they were all in the ground together. As at present arranged they clearly represent three periods.

Those of most recent make are the smallest, forming the upper part of the necklace. They are cylindrical, purple and white, varying in diameter from less than an eighth to three-sixteenths of an inch,

and are of white man's make. Nearly all the fictitiously valuable wampum belts are composed of similar beads, large quantities of which were made by the Dutch and French for trading purposes in the old colonial days.

Older than these, if we may judge from appearances, are the large pendant and two long beads next to it. The latter are simply portions of the columellæ of small marine univalves of a species larger than any found as far north as the St. Lawrence. The large shell disk ( $2\frac{1}{8}$  in. diam.) is either very much indebted to European working methods, or the Indian mechanic was acquainted with the use of compasses independently of the white man. There is nothing to show that the shape of the disk itself was outlined by this instrument or by anything answering the same purpose, for the edge does not form a perfect circle, but the eight semi-circles round the edge have very clearly been made by some kind of dividers, as have also the very small circles as well as the rings they form, in the middle of the pendant, both sides of which are similarly marked. As this piece is slightly convex on each side, and of almost uniform thickness, it must have been formed from a very large shell.

The disks forming the middle portion of this necklace are so much weathered that it is not easy to say with certainty whether they are of European or of native make, but the well formed edges, and non-countersunk holes of a few, lead to the conclusion that, like the rest of the necklace, except those of columella origin, they are the work of the white man directly, or indirectly.

#### A FEW COPPER TOOLS.

Figure 55 in its proportions is more suggestive of a European tool than is any other copper specimen in our cases, and yet the resemblance may be only accidental; a short piece of metal would make a short implement, and, as in the case of figure 59 the flaring may be accounted for in connection with the hammering necessary to thin the edge. The head of this specimen is a little battered, but this is probably the result of usage since the tool was found on lot 33, concession 2, Ernesttown. We are indebted to Mr. H. S. Davy, of Odessa, for this somewhat easterly example of a copper implement.

Belonging to a different class is the specimen represented by figure 56, which was found on Clearwater Lake, Rainy River District, by Messrs. H. B. Otis and E. Ball, and was procured from them for us

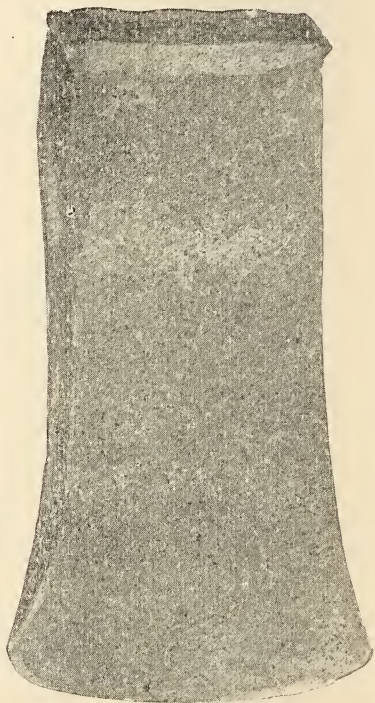


Fig. 55 (26,108). Full size.

by Mr. John R. Boyle, Edmonton. It is a fairly good specimen of primitive smith-work although not perfect in detail. The piece is slightly carinated from end to end, there being on both sides a double slope or thinning to the edges, a condition which, one would think, must have been brought about by grinding or rubbing rather than by pounding, as the latter operation is a somewhat difficult one, even for a skilled hammerman with the aid of good appliances.



Fig. 56 (24,999).  
Full size.

The fish-hook (figure 57) is the only one of copper we have. It was found in water six hundred feet deep at a distance of fifteen miles from the shore of Isle Royale, Lake Superior, and was presented to us by Mr. Dobie of Port Arthur, through the Rev. Dr. John Maclean, now of St. John, New Brunswick. As there is no barb on this specimen, it is not very likely that any claim will be set up for its European origin.

Worked objects of native copper are not common anywhere, and the farther a given district is from the sources of the metal on Lake Superior, the scantier, as a rule, is their occurrence. In this province some excellent examples of native workmanship in copper have been found, and at least two, of a pattern so uncommon that we have no record of its appearance anywhere else. One of these, found in an ossuary the site of which is within the present limits of Midland, was described and figured in the report for 1890-91,\* while the other similar in shape came from Bexley township, and forms part of the Laidlaw collection.

As a rule Ontario copper specimens are mostly in the form of plain axes, spear-heads, knives and beads. A few of the axes and spear-heads are provided with sockets.

Figs. 58 and 59 illustrate two of the most recent additions to the class of plain axes. Fig. 58 was

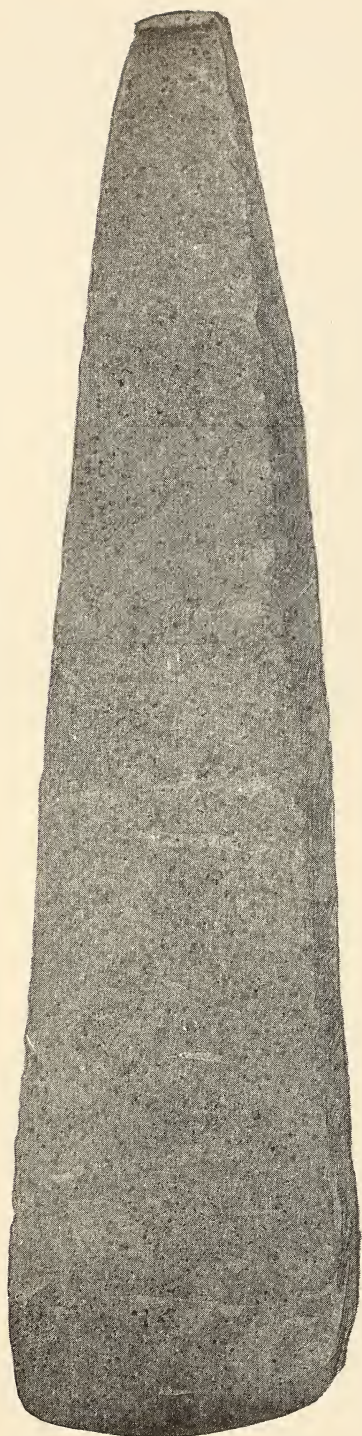


Fig. 57 (17,811).  
Full size.

found in McKellar township, district of Parry Sound, by Mr. J. M. Ansley, and was presented to the museum by Miss Elizabeth Ansley. It is a little battered on the poll (which is unusually small), but this may have been done since it was found.

\* Arch. Rep. 1890-1, page 61, fig. 145.





58. (22,904). Full size.

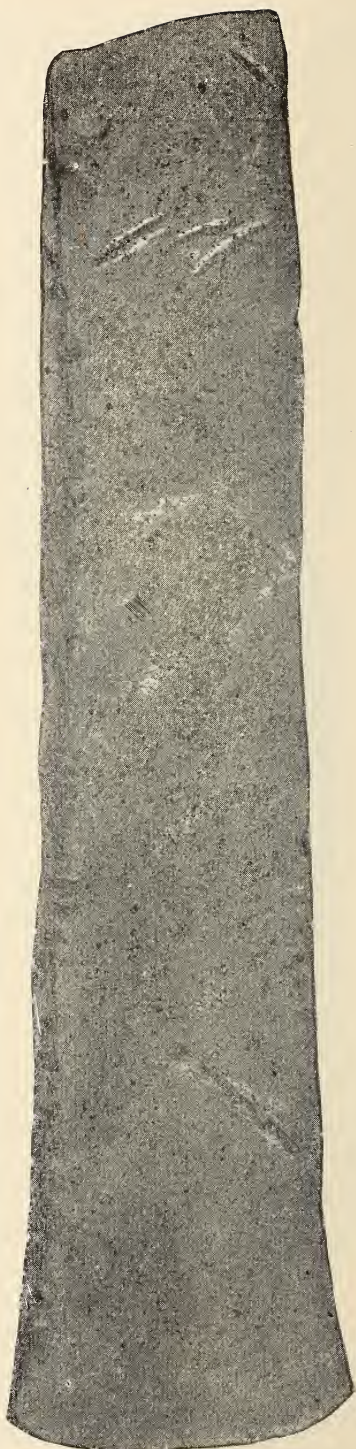


Fig. 59. (25,138). Full size.

Fig. 59 comes from London township, Middlesex county, Ontario. The only noticeable feature about this specimen is the rough style of finish at the poll end—not a finish that would indicate any intention to use the implement as a wedge, which some think was the only purpose such tools had. The flared lip is merely the natural result of hammering to thin the cutting edge.

#### A BRASS SMOKING PIPE.

On the Onondaga site already mentioned where so many clay and stone pipes were found, there were two brass ones turned up. One of these is illustrated by fig. 60. The other resembles it, but is much smaller. Both are made of sheet brass and the material was probably procured from worn-out pots or kettles of European make. It seems safe to assert that these pipes too, are the work of

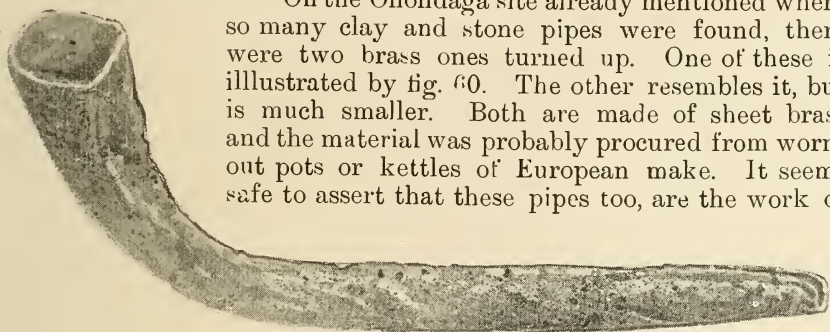


Fig. 60 (25,548). 4/5 diameter.

a white man. The edges of the piece of metal are very neatly overlapped, but owing to the verdigris with which the pipe is covered, it is impossible to say whether they are soldered or only hammered, but the latter is the more probable.

The head seems to have been formed on a mandril, although it is now slightly out of shape.

From a few traces of hair adhering to the stem, the pipe would appear to have been wrapped in a bit of fur before being placed in the grave. Perhaps other things were similarly treated at burial times, although the fur has now disappeared, but the copper salts have had a preservative effect. Two or three large copper specimens in our cases have pieces of beaver skin attached to them, the fur of which is yet in a tolerably good condition.

#### BORED SKULLS.

On opening an Indian grave near Arkona, Lambton county, Ontario, last summer, among the contents were found two perforated skulls one figure 61, having six holes, and the other (figure 62) having three. Both of these with some of the other skeletal portions were kindly presented to the museum by Dr. J. E. Brown.

In every respect, as far as can be ascertained, the interments had been made in the usual way, and the top of the grave was only some eighteen inches from the surface.

Other two skulls similarly treated came to us from the farm of Mr. Harry Mayor, lot 25, concession 12, Innisfil tp. Simcoe co., a few years ago. \*

\* Ontario Archæological Report, 1899, p. 26.



Figure 61 has a few wormian bones in the occipital suture, the largest at the parietal fontenelle, the next in size is a little to the left, with a few smaller ones on the right side.

Figure 62 is the skull of a more aged person than is that of figure 61, judging from the appearance of the sutures, the parietal one having almost wholly become ankylosed, and the occipital one, partly so.

The facial index of figure 61 is a little over 80, and that of figure 62 is 75, thus determining them respectively as brachycephalic and dolicocephalic.

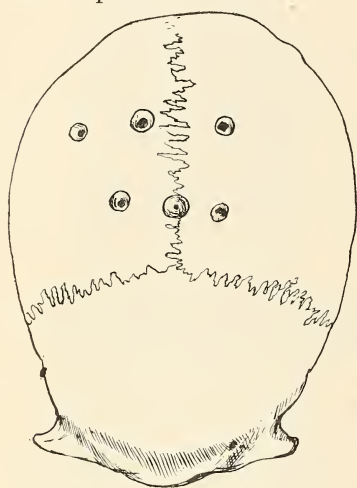


Fig. 61.

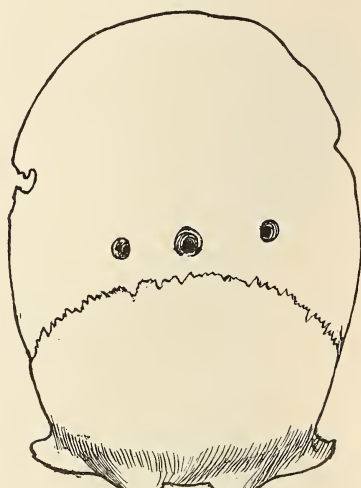


Fig. 62, (26,546).

It is somewhat difficult even to guess why skulls should be artificially treated as these and the Innisfil specimens have been. Of one thing there can be little doubt, and that is that the boring was *post mortem*; at any rate, there is nothing to indicate life energy after the holes were made, as we see in some cases where trephining has been performed on Peruvian crania, from which quadrangular buttons were removed by a sawing process.

#### A BURIAL PLACE IN ONONDAGA TOWNSHIP.

From time to time during the last fifteen years considerable quantities of valuable material have been received from a somewhat restricted area comprised in what is now the townships of Beverly, Ancaster, Brantford, and Onondaga, a large contribution from this locality having been presented to the museum by Mr. F. W. Waugh only last year. In this report it will be seen that specimens catalogued from 25,439 to 26,085 in our accession list have been added during the present year from this locality. These were collected by Mr. Walter M. Dick, of Brantford, at intervals during several years, and mainly from a number of graves he discovered on the Walker farm, lot 10, con. 3, township of Onondaga. What follows respecting this place and the specimens found there, is mainly from notes supplied by Mr. Dick.

That portion of the Walker farm on which the graves were found



containing the specimens, forms, with a part of the adjoining lot, a roughly quadrangular peninsula, along three sides of which flows a tiny stream. The accompanying sketch (figure 63) will enable the reader to make the necessary references.

The area of this land is not less than fifteen acres, and it varies in height (above the level of the creek) from about eight feet in the east, to forty or fifty in the south-west. The bed of the creek is now dry in summer, but no doubt formerly contained water all the year round.

The soil where the graves were dug is sandy.

Numerous camping sites may be traced not far from the graves, but these were almost certainly connected with a people or peoples, who occupied the ground before or after those who made it a burial place.

The graves are numbered to correspond with the order in which they were examined.

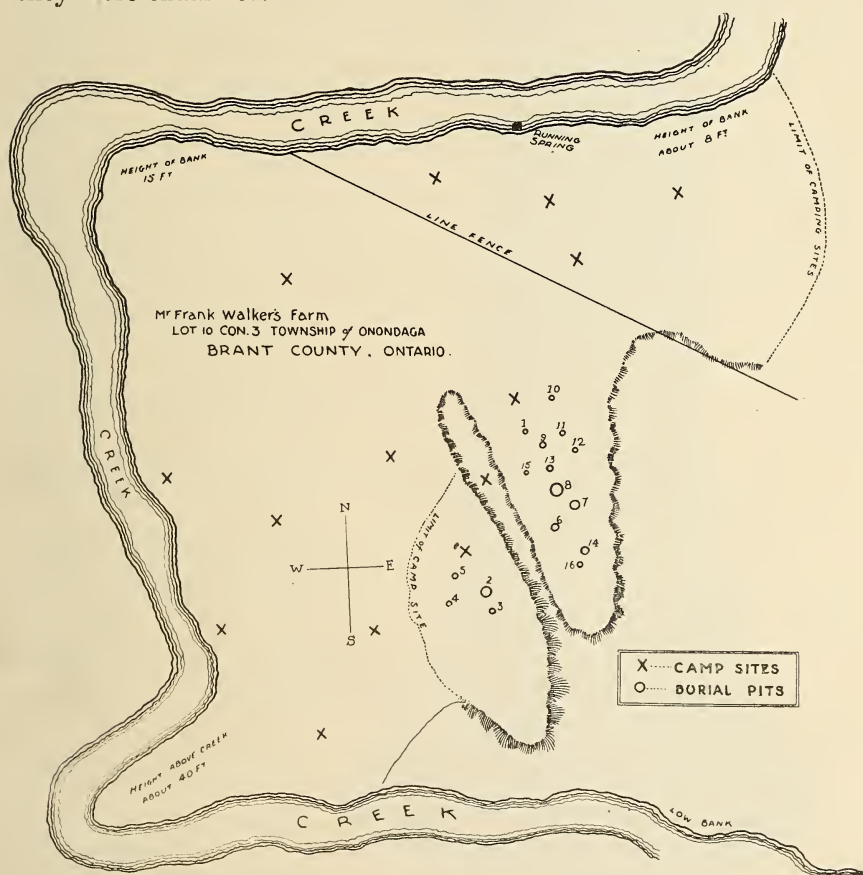


Fig. 63.

No. 1 was a little less than three feet in depth and contained two skeletons lying side by side. Besides the bones there was nothing, save a few shell beads.

No. 2 was eight feet in diameter and five feet deep in the middle. In it was some sixty-five or seventy skeletons, and some good specimens of relics.

No. 3 contained about twelve skeletons. In this grave was found a very well made white stone pipe representing an owl (Fig. 6).

No. 4. In this grave there were nine skeletons. Besides the bones there was nothing here but an earthen vessel (25,439). Some of the bones lay at a depth of four feet from the surface. The stump of a pine about eight inches in diameter remained over this grave.

No. 5. In this grave only one body was buried. Nothing else was found in it.

No. 6 contained eight bodies, and with these were a few shell beads.

No. 7 was a large grave. Besides many skeletons there were numerous relics of excellent quality and many different kinds. A brass kettle was found here.

No. 8. This was a very large grave—fully twelve feet in diameter and six feet deep in the centre. As the bones appeared to have been thrown in, regardless of order or arrangement, and so many were in a decayed state, it is difficult to say how many bundles of bones, or how many bodies in the flesh were placed in this grave.

In the very middle of this ossuary was a child's grave not more than three feet in depth, and it was through first finding this that the larger burial place was discovered. With the remains of the child were found a few shell beads, and a large circular gorget of the same material, about five inches in diameter, perforated with five holes in a row. As the relics are similar in kind to those found in the other graves, the inference would seem to be that the smaller grave is not intrusive in the usually accepted sense, yet why so situated, one may only surmise.

No. 9. Here there were the remains of eight persons. Nothing else was found.

No. 10. This was a single grave, and contained nothing but the bones.

No. 11 was a child's grave, in which was found a small shell gorget.

No. 12 contained the bones of only one person, with which were buried numerous interesting specimens.

No. 13. In this grave there were about a dozen of skeletal remains, and quite a number of fine archeological objects. This burial place was unusually deep in proportion to its diameter, its width and depth being five feet.

No. 14 contained numerous skeletons (the exact number was not ascertainable) and a large quantity of good specimens.

No. 15 was a child's grave. The only article found with the remains was a small shell gorget.

No. 16. Here there were some four or five skeletons and a few specimens.

A glance over the accession list (25,439 to 26,085) will show that the burials in most instances, if not in all, were made subsequent to the arrival of the whites, and perhaps as recently as from 1700 to 1750. Of this we have evidence in the glass beads, iron axe, brass kettles, and copper wire.

Unfortunately the graves were not opened with any other purpose than simply to secure their contents, so that it is now impossible to speak with anything like certainty respecting what many of the graves contained, neither have we anything to guide us in coming to

a conclusion as to whether the camp-sites are of older or of more recent date than the burial places.

Special notes on some of the articles from the Onondaga locality will be found elsewhere.

### A GOOD PIECE OF WORK IN STONE.

It is very seldom that anyone sees a more beautiful, or more comparatively, perfect specimen of workmanship in stone, executed by means of stone appliances, than that which is illustrated by figure 64, which was found in Comox, British Columbia. To say it is absolutely perfect, as is sometimes asserted respecting objects of Indian workmanship, would not be correct, but its degree of perfection is such as to bring out very clearly the capabilities of our British Columbian Indian, as a mechanic. The man who made this pestle had an excellent eye for symmetry and proportion. Now-a-days we have turning up here and there, writers who profess their ability to prove that it was only a trifling task to construct an immense mound; that the making of stone arrow-points was mere child's play; that the boring of holes of any size through stone was quite an easy matter, and one that could be accomplished very quickly; and that, Indians didn't know very much about how to do anything beyond clubbing one another, until the white man came here. On this account it will scarcely startle us to be assured that the Rocky Mountain aborigines knew nothing about this form of pestle, or muller, or grinder, until after the arrival of some "Kintosh" or "Boston"\*



(22,646) 5/7 diameter. Fig. 64.

in the Straits of San Juan de Fuca, or of Georgia, and that the pattern was copied by them from one in possession of a ship's doctor!

\* "Kintosh" or King George, and "Boston" are said to have been the names by which early British and American whalers and traders were known to the natives.



The pestle in question is exactly seven inches high, is three inches and a half in diameter at the base, and about two and a half at the top. In cross section no part of it is truly circular, yet the work in a general way is admirable, and quite as good as most white men could accomplish with excellent workshop appliances not including any kind of lathe.

This very fine specimen was presented to the museum by Mr. John B. Boyle, of Phoenix, British Columbia.

In Ontario the native was satisfied as a rule to use a large water-worn pebble of handy shape as his upper millstone, but to the south of us some pains were taken to make a form of muller or pestle roughly resembling the one here figured.

### BRITISH COLUMBIA MUMMIES.

Mortuary customs although not a subject of the most cheerful kind are of much ethnological value. The great variety of them within the limits of the Dominion would surprise many readers. British

Columbia alone supplies us with examples of what may be called mummies.

Two of these figures 65 and 66 have come into our possession in a somewhat roundabout way, and we are not yet able to supply as much information respecting them as we would like. Inquiries made, have been, to a large extent, unavailing. The most satisfactory reply comes from Dr. C. F. Newcombe, of Victoria, who writes:—

"I have myself seen on the west coast two modes of burial, one in caves or natural fissures, and the other on the surface of the ground.

In both cases the bodies have been wrapped in matting and then placed in boxes\*, plain, or painted with totemic devices and



Fig. 65 (26,736)

\* An excellent coffin-box of this kind in the museum is made without the board that forms the sides having been cut. The corners are half checked, and bent. Lid and bottom are shouldered deeply to fit over and outside of the sides, and the exterior is decorated with characteristic designs in black. See report for 1891, page 53.

then simply deposited on the surface of the ground or in the fissures. Usually these burial places are near the villages, often in the woods close by. Sometimes, as at Kyuquot, an isolated rock is utilised, which was formerly a fortified (palisaded) place of refuge in times of war".

From Mr. W. H. Jones, who presented us with the coffin referred to in the foot note, I learn that stones are usually piled cairn-like, over the coffins when placed on the ground. Even this, one would think not a very effective precaution against the attacks of predacious animals unless the bodies themselves are in such a condition when buried, as not to offer the animals any temptation.

Figures 65 and 66 are different views of the same mummy, and tell their own story so far as condition and appearance are concerned.

It may be stated that the date of burial of the bodies is not very remote, if we may take our clue from the fact that they were wrapped in coarse woollen cloth, of a deep red color, fragments of which are still adherent to the remains.

Since the foregoing was in type, a letter has been received from Mr. John A. Coates, to whom we are indebted for the gift of the mummies. Mr. Coates' prolonged absence from home accounts for the delay in his response to my enquiries.

"He writes:—The specimens were obtained on the west coast of Vancouver Island. The largest one was obtained from a shallow cave on an island used for burial purposes. The smaller mummy was upon an island, and was wrapped in cedar bark blankets, and covered by some split cedar boards.

These evidently belonged to the Clayoquot tribe."

There is still much, no doubt, to learn respecting the mortuary customs of the people with whom the mummies were connected.



Fig. 66 (26,737)



## THE STANDING ROCK.

*By F. Birch.*

To the lover of Indian lore, (and comparatively speaking, there are but few) there is found on page 106, Archæological Report, 1902, a paper of thrilling interest from the facile pen of the Rev. A. E. Jones, S.J., Loyola College, Montreal, and more especially does this apply to the people of Collingwood, Craighleith, Thornbury, and surrounding country, directing attention as it does to a matter of aboriginal history, regarding the Huron nation which existed in their immediate neighborhood. Father Jones discovered the "Standing Rock" (mentioned in the Jesuit Relations) in the township of Nottawasaga near the junction of the townlines of Collingwood and Osprey, and located the Indian villages of St. Mathias and St. Jean, the former below the Rock of Ekarenniondi, and the latter, with a population of six hundred, twelve miles further south in the township of Osprey. It is well known that the inhabitants of those villages cultivated corn, pumpkins, sun-flowers and tobacco. At St. Jean, allusion is made to the curing of and the rapid and successful growth of the indigenous tobacco plant, page 112. Now, I cannot help but think that after all, Father Jones has not found the right place, and I shall now state why I disagree with him. I contend that in those days, corn and tobacco could not be grown on the tableland of Ontario, so far from the lakes or from Georgian Bay, as Osprey, on account of the summer frosts. The "oldest inhabitant" (and surely he ought to be entitled to some respect), is emphatic on this point. Many farmers in this section of the country can speak by bitter experience of the terrible effects of the frosts of early days. I have seen the wheat when it was nicely out in head, cut down to within two inches of the ground, and the timothy utterly destroyed in Osprey, Holland, Artemesia and Euphrasia. Artemesia became a byword and was called the "Heart of Misery," but happily this condition of things has passed away now that the country has been cleared and cultivated. In our day, at the base of the Blue Mountains, farmers are about two weeks earlier with seeding and harvesting than they are in Osprey and the southern portion of Euphrasia. There could be no inducement to found a village in Osprey unless for the abundance of game. Elk and moose abounded. Occasionally the remains of both animals are found with those of wolves in the deep crevices of rocks that intersect the ground in some places. After many inquiries among the people of Osprey I have failed to find any evidence that Indian villages existed in the township, and they all assert that such rocks as those in the "Devil's Glen" are common in this part of the province. Assuming that the summer frosts rule out the existence of those villages, where then shall we look for Ekarenniondi of the Petuns? I would suggest about five miles and a quarter further north in Collingwood at the place known as the "Indian Caves." I had heard of an Indian village site below the caves, and was positive of another on lot 28, con. 10, Collingwood, twelve miles away, which tallies with Father Jones' account, only that it is to the west instead of the south. I determined to investigate as soon as opportunity



offered, and if possible to find St. Mathias. This would give the necessary condition. The two frontier towns at the confines of the Petun nation were open to attack from the direction of Toronto, the gateway to the Indian country. I went to examine the "Indian Caves," lot 14, con. 2, Collingwood, Oct. 9th, and the weather was all I could wish for. Fire had run over the base of the rocks and burnt down the standing timber, and a thick growth of underbrush had taken its place, affording a splendid cover for partridge and the cottontail. The rocks extend east and west for half a mile, and a cleavage runs the whole length, the detached portion having settled downwards and outwards, and in places the top has fallen back into the fissure, leaving caves underneath, but in some places standing entire. Being alone and a stranger I did a lot of hard climbing which could have been avoided had I known what I do now. I took "Excelsior" for my motto and went up and over every obstacle. Farther to the east Mr. Blaikie has a good road, for the accommodations of visitors, of whom thousands visit the caves every summer. I found the rocks rough and rugged, and on a grander scale than any I had yet seen, and more than one place which might be truly designated the "Standing Rock," but there is a particular spot on Blaikie's farm where the rock overlooks the old village, and this I think is Ekarenniondi. Picking my way carefully among the debris, I came to a sort of amphitheatre forty or fifty feet in diameter where a second slice had fallen off the main cliff and into the chasm, making a floor about fifteen feet below, which was covered with vegetation. Looking down I was surprised and pleased to find I had intruded on the private domain of a porcupine all in his "fretful quills." I watched him for sometime as he fed on the leaves and berries, and I thought to myself, well there is a "Huron" that no Iroquois brave would like to fall upon. I spent nearly two hours clambering among the rocks, sometime down in the caves (where the sun's rays never penetrated) then up on the pinnacles until I was thoroughly satisfied that here was the "Standing Rock." In one place the rocks rose in the shape of a pyramid with two huge blocks on top, side by side, affording space enough to accommodate a dozen men. Here I took my stand and looked on a scene of marvellous beauty, to my right was Ossossane where the fugitives from the Huron villages crossed on the ice, journeying the whole night to reach the friendly shelter of St. Mathias (at least I presume so) page 110.

How I came to find the village site of the "Standing Rock" or (what I suppose to be) St. Mathias is as follows:—

Some twenty-five years ago I was informed by a farmer that where he had built his house and cleared his garden patch, had once stood an Indian village. He described how the lodges must have stood in a circle, by the position of the beds of ashes which he found here and there, and the ashes were deep. He spoke also of finding tomahawks, pipes, bones, pottery, etc., etc., all of which information afforded me great pleasure, but I could not find time just then to investigate, and I little thought that I should ever be back to the same place, but it is always the unexpected that happens.

Going down the mountain road a short distance, I turned into a byway leading off to my right, and going in an easterly direction. A

few minutes walk took me to a farmhouse belonging to a family by the name of Haney. I found them a very friendly people who received me kindly and soon made me feel at ease. In interviewing them I was much disappointed at first. I could not glean any tidings of my friend Smith, but after chatting sometime, suddenly Mrs. Haney remembered that a Thomas Smith had once lived there, but had since died; that was all I wanted to know. After that, all was smooth sailing. I was on lot 14, con. 2, Collingwood, owned by Samuel Haney, the very place I was searching for. The village site is at the north end of the lot, and at the south end the rocks stand out in bold relief. The village had stood on slightly rolling ground, just enough so for sanitary purposes; it had an easterly exposure, and was on the west bank of a brook whose spring came from the rocks above. Miss Haney took me to search for "relics." The potato patch where we went just north of the house had been harvested so that the ground was nice and clean. I counted four middens in this patch and near the bank of the little stream; each of them I should judge would be twelve feet square, and a foot deep or more, and were north of the village on lower ground. With the spade I happened to turn up some of the subsoil, and behold there was "Paint with which they were wont to daub their faces," *Archæological Report*, 1902, p. 107. The clay was rich in oxide of iron, and with a mixture of grease would answer the purpose quite well. Miss Haney said "anything you find you are quite welcome to; we have given away a great number of pipes to visitors." I thanked her, and strange to say in a few minutes the young lady handed me an excellent pipe picked up at my feet and which I had passed unnoticed. It was of limestone, with a reptile carved in bold relief upon it. It was stemless and had holes bored through the bottom for a string, perfect in all but the head of the reptile which was broken off. I found several portions of broken pipes and pottery; two bears' tusks, a portion of a human skull and a strip of iron about five inches long and two inches wide, sharpened at one end for skinning or scalping, perhaps it was a piece of a sword blade. This goes to prove that they were in touch with the French. Miss Haney also informed me she had found a quantity of large beads, about one hundred yards north of the village, but unfortunately they had been either lost or stolen. I attach great importance to these beads. I think probably they belong to a priest's rosary,

I noticed one thing in particular when I left home, namely, that everything had been cut down by the frost while here, on lot 14; con. 2, all was fresh and green, no sign of frost whatever. Half-past four p.m. came all too soon, and it was with a slight twinge of disappointment that I found my holiday at the Blue Mountains of Collingwood had ended, but time was inexorable and I had to depart, but I left with the satisfaction that my exploration of St. Mathias had been successful, still, I cannot prove that I am right, but my reason for writing this article is simply this—believing that Father Jones has made a slight mistake of five miles in spite of all his elaborate calculations, owing to those misty documents written by the old French Chroniclers who have got things a little mixed, I would like if possible to make them right as far as my knowledge goes, and to help to find the spot, and perpetuate the fame of those brave, noble-hearted, self-

denying missionaries, who sacrificed their lives for the good of the cause they represented. The Standing Rock would have remained a mystery but for the labors of Father Jones, as well as for his very exhaustive and charmingly written essay in the Archæological Report for 1902.

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## VICTORIA COUNTY.

By GEORGE E. LAIDLAW.

New sites reported, but not visited, are as follows:—

No. 36. East half lot 20, con. 8, Eldon Township, owned by Donald McArthur, cleared by J. Sutherland forty years ago, site now occupied by buildings, usual relics, ash beds, pottery fragments, etc. Also, a skeleton found under the roots of a large maple tree.

No. 37. Lot 6, con. 10, Carden Township, owned by Patrick Duggan; attention being called to it by John Cuppins, Cameron P.C., who found relics there in 1902. The usual class of site, situated on a high gravelly hill, Beaver meadow close to hand. Arrowheads occur here.

No. 38. A large area on Mr. Bruce's farm yielded lots of pottery fragments and other relics, when first cleared many years ago.

Lot 41 S.P.R. Eldon Township, Kirkfield P.O., Mr. Bruce recovered a whole pot from this place, and said the place was literally paved with relics when he first went on the farm. My attention was first drawn to this site and No. 36 by Mr. S. Truman, Kirkfield.

No. 39. W. Thornbury's lot 12, con. 10, Eldon, is another site in the group north of Goose Lake, Eldon and Fenelon Townships, distant about three miles. The usual relics, etc., prevail here.

In connection with these sites I may say that they are not immediately on the edges of lakes or water-courses, but some little distance inland in hilly localities with soil eminently suitable for aboriginal cultivation, and with the exception of No. 37, which is north of the Talbot river, lie a good distance south of the Portage along the Talbot river. Nos. 36 and 38 may be classed in a group with Nos. 9 and 10 (see Report for 1901, p. 106), occupying the high hilly table land south of Kirkfield.

*Relics.*—A copper arrowhead picked up by myself, on site 20, last September, block E, Bexley, on lake shore, much weathered; dimensions, three inches long, by  $\frac{7}{8}$  inches width of blade, which is flat, and not possessing the triangular cross-section so common to copper spears and arrowheads. The socket is slightly shouldered to prevent the shaft from slipping up the blade, and is  $1\frac{1}{4}$  inches long.

Iron knife made from saw blade, evidently shaped with a cold chisel. It is in an unfinished condition, was found on banks of Grass River, Victoria Road, P.O., presented by Dr. Jas. Grant. Blade,  $6\frac{1}{2}$  inches long, tine 2 inches. Some doubt may be thrown on this relic, as it may have been made by some early pioneer or hunter. It is worthy of remark that the cold chiselling has been done all on one side.

A very large stone bear pipe was found in August or September, 1902, on lot 6, con. 20, Tiny township, Simcoe county, Ont., by Mr. T. H. Newberry, who disposed of it to Mr. Oliver Glaspell, Powle's



Corner, P.O., Fenelon township, Victoria county, from whom I obtained it. Was found on the route of the Indians, or trail, from Sawlog Bay to the highlands of Tiny; no other relics were found near it, it being found on the surface of the ground. Thus, to my mind, relegating it to the later Hurons, or to the Algonkins, who occupied that locality upon the forced retirement of the Hurons. The pipe was in a fragmentary condition, and is now restored *minus* the forefeet and a portion of the frontal bar. Material, a dark grey slate; posture similar to the animal pipes figured in report for 1902, pp. 40-43. Dimensions  $6\frac{3}{4}$  inches in perpendicular height, distance between parallel lines at back and nose  $4\frac{1}{4}$  inches; greatest thickness of body from side to side, 2 inches; greatest depth of body from back to front, 2 11-16 inches; length of head, 2 3-16 inches; breadth behind ears, 2 7-16 inches. Stem hole bored with a tapering drill, bowl shows plainly drill rings, and contracts very rapidly, being  $2\frac{1}{2}$  inches deep and  $\frac{3}{4}$  wide at top. Stem hole is at the back. Eyes are large, deep, circular depressions. Ears prominent and rounded, the right one evidently being slightly broken at one time, and then ground smooth. Ear holes slightly defined, as also are the nostrils,—most rare occurrences. No slots or markings on surface of pipe other than those that represent the claws. No basal perforation, though there are deep depressions produced by boring where the basal perforation is usually situated in these pipes. A deep nick terminates each hind foot, separating it from the frontal bar, thus showing probably that the designer did not intend the frontal bar as a branch clasped by the feet as in other cases, but rather as produced, tail and hind paws slightly raised from body. The portion of the frontal bar immediately opposite the hind feet is slightly larger than the remaining portion. The top of the frontal bar, and the fore feet are missing. Mouth strongly defined, face very much “dished” or “hollow,” strongly resembling a raccoon’s, but the jaws are too long in proportion, and too square at the end to resemble that animal in any marked degree. The drill has been used in forming the throat, and marks of sawing and rubbing also appear. Are these what McGuire calls “file marks” in his aboriginal pipes, etc.? The material changes to a dirty purple on the frontal bar; weight  $2\frac{1}{2}$  lbs. avoird.

It has been suggested that this specimen represents the brownish variety of the common black bear. At any rate, the contour of the face is directly opposite to that of the Bolsover bear pipe, p. 40, Report 1902. This pipe is of purely aboriginal workmanship, the design being bold, the head resembling style of Huron clay pipes. The pipe though called a bear-pipe shows a composition of features; in the large, round eyes and hollow cheeks of a raccoon, and the strong heavy jaw of an old dog wolf. The marks of boring on the surface of body show the use of blunt drill.\*

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\* It is probable that a full description and illustration of this remarkable pipe will appear in the Archæological report for 1904.

## VILLAGE SITES IN NORTH ORILLIA.

One of the best known village sites in North Orillia is to be found on the farm of Mr. Amos Rogers, lot 6, concession 13.

When first "located" for settlement, now nearly seventy years ago, Mr. Rogers' father observed what seemed to be comparatively recent signs of a clearance, that is, an area of some two or three acres was occupied by trees of considerably smaller growth than those of the neighboring bush; and it is said that straggling Indians camped occasionally on the spot.

Since the land has been cleared, numerous traces of Indian occupation have come to light, in the shape of broken pottery, flint chips, pipes, and stone tools. Mr. Rogers had brought some of these together, but all were lost in a fire which destroyed his dwelling-house. We now have records of numerous fires in which larger or smaller collections of Indian relics have been destroyed, and the moral is: Do not keep your archæological specimens at home—send them to the Provincial Museum, where they will be not only comparatively safe from destruction by fire, but will be available as objects of more or less interest to everyone concerned in the study.

A close examination of the ground on two visits failed to disclose much on the surface, but perhaps, when the ground has been loosened by the plough, evidences of occupation will be made more apparent.

From Mr. Rogers and others, I learned that some years ago a shallow grave was discovered not far from the village site, and that two bodies were found in it.

The village site on the Roger's farm is at the northern extremity of Lake Couchiching, and was at a convenient distance as a halting-place before or after passing the Severn, or it may mark what was one end of the trail, or portage, of which the old settlers say there were numerous examples between Couchiching and the Muskoka hunting-grounds.\*

A few fairly good specimens found on the farm were kindly presented by Mr. Rogers to the Provincial Museum.

A short distance south of Washago, in the township of Rama, another village site is reported on the lake shore, but as it is on land forming part of the Indian reserve not very much is known respecting it.

Not very far away from the town of Orillia, on lot 6, concession 5, there is a somewhat unusually large and interesting village site to which attention was directed by Mr. C. H. Hale, who was also good enough to accompany me to the place.

It is on the brow and summit of the highest terrace rising from Lake Couchiching, and its greatest elevation does not, probably, exceed forty feet. The situation was an excellent one for aboriginal strategic purposes—far enough away from the water's edge to be thoroughly obscured by the surrounding forest; high enough to give it command of approaches from the shore, and capable of being well

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\* On this subject, Mr. Chas. I. Robinson writing to the *Orillia Packet*, says:—  
The main Indian trail of the lower waters went down the west branch, and came out the Severn river. So plain was the track that it was worn into the rock. The rider of this has been over all the portages from these waters to those of Muskoka, anterior to the white man's settlement."

protected on the land side by means of the ordinary Indian methods. In addition to these advantages the terrae at this point has been eroded deeply, and forms a gully the sides of which are so steep as to make the climbing of it anything but easy.

It is now many years since the land here has been cleared, and most of it cultivated, in consequence of which, and the whole area being in sod, there are scarcely any surface signs to indicate that here was once a village or town—perhaps one of the original Cahiaques. Many native born Orillians however, of mature years, have a distinct recollection of the numerous ash-beds that marked this place, and from which, I am assured by Mr. Hale, both young and old used to dig up clay pipes, flints, and implements of various kinds.

Mr. J. H. Hammond, Solicitor of the Supreme Court, Orillia, writes:—"Orillia seems to me to have been a very populous place in the early days, and the subject has been studied by me for a number of years, in fact, since boyhood, tracing as well as I was able the different village sites; in fact, I do not know all of them yet, as within the last few days I have heard of two more that will be verified by me as soon as the snow is off the ground. I have visited over forty-six of these sites, all within the bounds of Orillia, North and South, all with well-defined ash heaps and pottery (broken), so you see that the subject is to me interesting as well as instructive."

Mr. Hammond has rendered very valuable assistance to Mr. A. F. Hunter by way of directing attention to village sites.

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## INDIAN VILLAGE SITES IN NORTH AND SOUTH ORILLIA TOWNSHIPS.

The settled parts of both townships are hilly. The ends of two long ridges come out of the adjoining townships along the west side,—the one out of Medonte into North Orillia, the other out of Oro into South Orillia. Besides these, a long ridge runs through both townships, near Lake Couchiching and parallel with it, for several miles. This prominent line of high ground, which takes a north-easterly direction, is known locally in North Orillia as "The Ridge." It extends as far as the ninth concession of that township, and owing to its isolated position, it is quite a conspicuous feature in the landscape. It deserves our special attention, as it is, in a sense, the barrier that holds back the waters of Couchiching from pouring directly over to Georgian Bay, deflecting them by the Severn River.

At the town line between the north and south townships, there is a break where "The Ridge" in North Orillia is cut off from the high ground in South Orillia. Branches of Silver Creek take rise in this gap, becoming fair-sized streams; and the Midland Railway utilizes it for a passage. Village sites of the early Huron period, some of them quite populous, are found generally along "The Ridge," but are more numerous in the vicinity of the Silver Creek openings than elsewhere.

The "Algonkin" shoreline girdles these hills or ridges, as elsewhere; and this extinct shoreline is marked on the accompanying map to give the altitudes of the different parts of the townships. The "Algonkin" is a strong shoreline everywhere, but in the Orillia townships it is even stronger than elsewhere. The main cutting is

very distinct, and about sixty feet lower the base of the submerged filling also becomes a well-developed shoreline. The term, as used in this report, applies to the main cutting. This main strand of the shoreline, in the vicinity of Silver Creek, attains an altitude of 875 feet above sea level, or 155 feet above Lakes Simcoe and Couchiching.

North Orillia is a large township, but parts of it are still covered with original forest. It has, accordingly, been found unnecessary to show more than a portion of this township on the accompanying map.



*The Village Sites.*

The list of 34 sites (12 in North Orillia and 22 in South Orillia) may not contain one-half the sites that will ultimately be recorded for these townships. It is necessary to emphasize that I make no claim for completeness or perfection of the lists, especially that for the north township. But the sites I give are the more conspicuous ones, and will lay a foundation for future work by showing the lines of early occupation and travel. Even these show evidences of a considerable population in the early Huron epoch,—the first half of the seventeenth century.

The plan followed here being the same as in earlier reports, the task of collecting the data and its attending difficulties have been sufficiently dwelt upon in those reports. In the present one, equal pains with those previously issued have been taken to make the observations correct, and the features described may be verified in most cases by everyone for himself.

The Huron occupation of the region now under consideration, in relation to its physiography, was not different from that of the townships previously examined. The Hurons, kept to the high ground or ridges, as we found them doing elsewhere. The ground in the south part of South Orillia was not well adapted for occupation by Hurons and their allies. It is too stony and gravelly, and the small ridges there are too abrupt and narrow for their settlements. The high ground above the "Algonkin" shoreline in the north half of South Orillia, according to the remains that have been found, was their favorite habitat. Besides this, Brough's Creek and its branches, falling into Shingle Bay, made a wide obstructive marsh.

Like the other townships of this district, each of which has an important feature of some kind, the Orillia townships have one of their own not less interesting than the others. They contain the line of contact between Huron tribes and those named Algonkin in the Jesuit "Relations." Some of the village sites show differences of their own, when compared with villages in other townships known to be distinctly Huron. Hence, I am of the opinion that the former were the villages of the Algonkins. There may have been some overlapping of the Arendarronons (the most easterly Huron tribe) with the Algonkins, so that some sites belonged to one and some to the other. And as the sites here as elsewhere do not all belong to the same year, or even to the same period, one may have followed the other over the same ground. Further study of the sites will, perhaps, reveal some movement of this kind. But in any case, the sites which I am inclined to call the Algonkin sites have distinct characters, and might almost be said to preponderate over the Huron sites in the Orillia townships.

The Indians who inhabited the sites which show the differences just referred to, when compared with those of known Huron sites, show marked development along certain lines. The more conspicuous of the differences are as follows:—

1. Disks. There is an abundance of stone and pottery disks. These are found in small numbers on some known Huron sites, but not in such profusion as we find in the present instances.

2. Individual burials. A patch of single graves is to be found at every one of the sites in question. This is unlike the mortuary practices of the true Hurons who practiced scaffold burial, combined with bonepits. In most cases, however, the patch of single graves is accompanied by a bonepit or two.

3. Highly decorated pipes and pottery. In the ornamentation of clay pipes, the pictorial art had a more extensive development in the Orillia townships than in the townships farther west where the true Hurons were located. We may safely conclude this ornamentation was due to Algonkin influence, whenever it is found on Huron sites. It is not to be understood that modern Algonkins necessarily show a continuation of the skill of their ancestors, or any trace of it. It was the Algonkin-speaking tribes of three centuries ago to which our remarks apply.

4. Bone needles, awls, etc. The greater abundance of these on the sites called Algonkin, by us, may have been due to better supplied hunting grounds than the Hurons possessed. The latter tribes were more agricultural in their pursuits, and more populous.

5. Flints. These are more abundant than on true Huron sites.

6. The Algonkins showed remarkable ingenuity in forming arrow-heads out of pieces of brass from worn out brass kettles.

Some of the features just mentioned resemble those of some sites in the district near Balsam Lake, for the descriptions of which we are indebted to Geo. E. Laidlaw. The Orillia townships are not far distant from some of the sites which Mr. Laidlaw has described, and the points of similarity of some sites are therefore not to be wondered at. His descriptions in former Archæological Reports bring out well the points of contrast between a proportion of the sites in his district, near Balsam Lake, and true Huron sites.

For locating the position of Ste. Elizabeth, the mission of the Jesuits among the Algonkins of whom we have been speaking, Ducreux's map, although it gives this mission, fails to help us much, as there is a confusion of North River with Severn River, and the entire omission of one of them, as I previously pointed out. It is possible, however, that Ste. Elizabeth was in the distinctly defined group of villages near Silver Creek. In townships previously examined, we found evidence to show that a mission often belonged to a district marked off or isolated by physical features; and the one in question is so distinctly defined as to lead us to make this conjecture with a fair degree of probability. On the other hand there is a group of sites north of Bass Lake, partly in Medonte township, occupying a similar position with reference to North River that the Silver Creek group does with reference to Lake Couchiching and the Severn, and it will be impossible to settle the question definitely without taking into account the group partly situated in Medonte.

European relics are abundant in the Orillia townships, and this is one of their chief characteristics. Iron or "white-men's" relics have been definitely reported from 26 of the 34 sites, or 76 per cent of the whole. In this respect, the Orillias agree with the northerly tier of townships—Tiny, Tay and Medonte.

Some people have claimed that Cahiague, the Huron town visited by Champlain, was situated near Lake Couchiching, and was perhaps



the Mount Slaven site. The improbability of this site having been Cahiague is discussed in the description of the site itself.

### *Burials.*

There are eight bonepits reported, viz., at Nos. 6, 7 and 10, North; and at Nos. 3, 4 (2), and 15 (2), South. Two pits each are reported for the two last mentioned sites. Patches of single graves or individual burials occur at even a larger proportion of sites than in townships hitherto examined in our passage through the district of the old Hurons. Figures thus based on aggregate results afford us reliable and instructive data. In short, we have found this practice of burying in single graves where we locate the Algonkins; and we may, therefore, conclude that the single burial grounds in the other townships (such as No. 41, Oro), were due to the presence or influence of Algonkins. Bonepit and scaffold burial was evidently the rule among Hurons.

### *Trails.*

In these townships, as elsewhere, the Indian had his trails in accord with the hills, valleys and streams, following their natural order and positions. The white man pays but little attention to these circumstances, and has almost forgotten to take them into account in his reflections on Indian days and ways, except in one or two cases, notably the Coldwater Road. The Town of Orillia, like most other towns of our fellow-Caucasians, is built at the meeting-place of several Indian trails. It is, or was in the days of the forest and the red men, the centre point of branching routes. These were for the most part, not canoe portages, but forest trails, pursued by the Indians when journeying without canoes. It may be expedient to take these trails in order, passing around the various trails as around the spokes of a wheel.

The Muskoka Road. From the abundance of relics and sites found along the high ground in South Orillia, and thence along "The Ridge" in North Orillia as far as the ninth concession of the latter and beyond it, it is evident that a trail followed the ridge parallel with Lake Couchiching, but inland some distance from the lakeshore. The writer has frequently pointed out in connection with other townships, that the ridges, which were wooded with hardwood chiefly, invariably had trails along them. The low, flat land contained swamps or thickets and were less penetrable for walkers. The present instance is no exception to the rule. From Orillia town to Washago, the Muskoka Road, opened prior to 1858, along the east flanks of the ridges, and also parallel with Lake Couchiching, is the modern representative of the old forest trail. The present road, however, runs perhaps a little nearer the lake than did the old trail itself, yet the two follow the same course. This trail was in use down to modern times. The Rev. Dr. Gray and other early settlers testify to the existence of the trail here within their remembrance. There were also portages to the Severn River, and these crossed the Muskoka Road or trail to Washago.

The Coldwater Road. This was a long portage from the Narrows, or rather from Lake Couchiching at the point where Orillia town now stands, to Coldwater on Matchedash Bay, its length being fourteen

miles. In 1830, when Sir John Colborne, the Governor of Upper Canada, collected the Chippewa tribes of the district into a reserve here, extending along the portage, the original trail was cleared out as a road for vehicles, and it has remained an important highway to this day. Northwestwardly from the fourth line (S. Orillia), at the Orillia Cemetery, this road now runs through flat ground. But there is a conspicuous bar of gravel and sand, or old lake ridge, across this valley or channel, only 15 or 20 rods north of the present surveyed road. This bar would carry the original trail. A similar remark applies to the crossing of another channel nearer Bass Lake. Elsewhere the present course for the road is almost identical with the trail.

The Huron trail out of Oro to Orillia town site. This trail, which is the one Champlain evidently followed, is now represented by the Oro Road. Although the latter follows a straight course along surveyed lines, it carries a large traffic over the same route, the lines of transportation for white men being almost the same as those for their red predecessors, as in so many other places.

The Atherley Road. This evidently follows the old trail from Orillia town to the "Narrows", used when the aborigines travelled without canoes.

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## CATALOGUE OF SITES—NORTH ORILLIA.

### i.

On the east half of lot 21, concession 5. This place is far down the North River. Cranberries and huckleberries grow plentifully in the neighborhood, and have attracted the aborigines thither from time immemorial. Surface rocks make their appearance a little way off (viz., about lot 22) and extend northward indefinitely. In the summer of 1902, Fred Longhurst, the owner of this lot, plowed up an Indian's skeleton and an iron tomahawk.

### ii.

On the east half of lot 11, concession 3. Jay Walker. This site occupies a hill, and numerous relics have been found, including iron tomahawks. Flint arrowheads are plentiful.

### iii.

On the west half of lot 6, concession 2. Chas. Clark. They have found numerous relics and fragments, especially in their garden, but the site has been partly obliterated by cultivation. It extends into lot 7, formerly owned by the Drinkwater Brothers. The land hereabout is flat, but a little way east drops at one of the "Algonquin" shore lines.

### iv.

On the east half of lot 2, concession 1. A. Margrett. On the south side of North River numerous remains have been found. Chas. H. Moffatt once lived here and found numerous relics of the usual kinds, but it is noteworthy that his family found no relics of Euro-

pean make. They found many good flints here, but pottery fragments were not so abundant as at their present place in South Orillia. This was Jacob Powley's homestead in former years, and many surface pits (*i.e.*, empty caches, or, perhaps, single graves) were to be seen at that period.

## v.

On the east half of lot 1, concession 2. R. J. S. Drinkwater. His father, the late Capt. John Drinkwater, settled here in 1832. They have found many iron tomahawks, arrowheads, and stone axes on this farm, and north of Mr. Drinkwater's house some pottery fragments, showing occupation. Mr. Drinkwater has been very observant in matters of this kind; but although he has found numerous relics he has given them all away without making a collection of his own. This locality was once a favorite place for beavers, especially on a small stream running into North River here. The place is surrounded by streams, and thus somewhat protected as the site for a village.

## vi.

On the east half of lot 2, concession 4. Before the year 1870, Edward Turner discovered a bone-pit here, near the camps. He was following a path through the woods when he noticed a depression in the ground, and having seen such burial places before, he resolved to dig into it. On doing this, he found the deposit of human bones. He also found in the pit five brass kettles; one of these contained the moccasined toes of a squaw, which had been preserved by the copper oxide, but this relic decomposed when exposed to the air. According to Mr. Turner's description of the pit, it contained hundreds of skeletons. The soil is very sandy at the place. The pit is half way west in lot 2, and on a low ridge, along the crest of which the above-mentioned path followed. F. W. Fraser, of Toronto, who took part in the opening of this pit in or about the year 1885, was the first person to give me information of it. There were various single graves found around about the large bone-pit. In one of the isolated graves there were three skulls, one of which was supposed to be that of a European person, though with what certainty of proof I have been unable to find. Altogether there were some thirteen kettles found in the pit, and some wampum. In the single graves were found a clay pipe, a stone pipe and an iron tool.

## vii.

On the east half of lot 1, concession 4. John Ego. This lot was formerly occupied by the late Thomas Campbell. Some years ago, a large bone-pit was found on the southeast face of a hill, about half a mile west of Silver Creek. It was dug out at the time. Mr. J. H. Hammond, of Orillia, who gave me the particulars of this pit, also informed me that the soil at the place is sandy, and would be easy for the aborigines to dig with their roughly-made wooden tools.



## viii.

On the southwest quarter of lot 2, concession 5. Archibald Fyfe. This site is on the northwest side of Silver Creek, and close to it. Soil, sandy. It occupies a hillside. Mr. Fyfe has found numerous remains here, including stone axes, clay pipes, beads, etc.

## ix.

On the southwest quarter of lot 1, concession 5. Geo. Greer (who lives upon east half lot 2). The site is on a sandy plain, on the north side of Silver Creek. Iron tomahawks were found at or near this site, and Wm. Rouse, junr., of Mitchell Square, found a clay pipe of the "pinched-face" pattern, which is a distinctively Huron or Tobacco Nation form, belonging to the early French period or earlier. Mr. Rouse also found a part of the blade of a rapier. Mr. Greer has found, besides iron tomahawks, a steel knife, flat wampum beads, pottery disk and clay pipe bowls (Huron forms). There are or were some artificial depressions in the surface of the ground at this site.

## x.

On the west half of lot 3, concession 6. William S. Brennan. On the ridge at the rear of the dwelling-house, considerable quantities of pottery fragments and other remains are found. The pottery here was highly decorated. Mr. Armson, a relative of Mr. Brennan, while once excavating for the foundation of the house, found a large bone pit almost underneath the front door.

## xi.

On the west half of lot 5, concession 8. Robert W. Holmes. This site is a patch on the summit or brow of the Algonkin shoreline and consisted of ashbeds, with pottery fragments, some brass arrowheads, etc. It had a defensive position. Mr. Holmes has found iron tomahawks (French make) by dozens, and these are also to be found on other farms about here.

## xii.

On the east half of lot 6, concession 9. Charles Brailey. This site is near a small stream, and is in a line with the east end of "The Ridge" and a nice cove or bay of Lake Couchiching, the head of which is at the end of the eleventh line. The camps are about three-quarters of a mile from Lake Couchiching. There were ashbeds and empty caches or surface pits. In the ashbeds they found, in former years more frequently than in late years, brass arrowheads, bone needles, clam shells, etc.; and in the vicinity, iron tomahawks (French pattern) and stone skinners.\*

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\* As elsewhere pointed out these were axes.

## CATALOGUE OF SITES—SOUTH ORILLIA.

## i.

On the south half of lot 1, concession 1. Henry W. Smith. Here was once the Indian Agency on the Coldwater Road, and at an early date a clearing had been made in connection with it, in which the Indians grew corn. Remains of this have been found. A site of the early Huron period also, yielding some relics of various kinds—stone axes, pottery fragments, etc.—has been found half way east in this farm, but no iron relics. A human skeleton was found at the place. This site extends a little way into lot 2 (Chas. H. Moffatt's), but is a distinct site from the one at Mr. Moffatt's house and at some distance from it.

## ii.

In the west half of lot 2, concession 1. Frank Nelson. Some camps occur at a place on this farm, at or near the boundary of Mr. Goss' land (lot 3). Pottery fragments were abundant, and human face pipes in considerable numbers were found in the refuse many years ago, before the place had been much cultivated.

## iii.

On the north-east quarter of lot 2, concession 1. Charles H. Moffatt. (Mrs. Nelson also occupies part of this lot). An important village site occurs in the extreme north-east corner of the lot, covering five or six acres. It includes Mr. Moffatt's garden, and extends beyond it, crossing the boundary into lot 1. It also extends across the road here (second line) into the lots of the second concession. There is a small stream through the adjoining lot 1, and the Indian remains have been found along the south side of the stream. The Indian cabins were placed along the banks of the stream, chiefly, the village being thus long and narrow and accordingly not palisaded. As no iron or other European relics have been found at this site, it probably belonged to an earlier period than that in which there was a misunderstanding with the Iroquois, and hence, there was no great need of palisading. There are numerous refuse heaps here, one of them being two feet thick, and showing that the place was occupied for a long time. Mr. Moffatt has lived here since 1900, and as this village site is near the house, his family has paid close attention to the numerous articles that have turned up from time to time. Bone needles and awls were uncommonly plentiful, some twenty having been found. Other articles were:—Wampum beads (bone and stone, but no shell wampum), a dozen stone axes, clam shell fragments, bears' teeth (some of them with holes for suspension as bangles), teeth of beavers and porcupines, thirty or more stone and pottery disks, many flints, a bone arrowhead, corn grains, etc. The pottery fragments found here are highly decorated, one of the pieces showing a human face as part of its decorations. The pipe fragments of this site well repay a careful study. The clay specimens show an uncommon development of the pictorial art, perhaps not even so much as a single plain pipe having been found, but all being decorated. Here is a partial list of some of the pipes:—

Human effigy pipes in considerable numbers, several of the cornet or flared-mouth pattern, a square mouth specimen (modification of the cornet pattern), numerous specimens of the belt pattern (one of them showing a modification of the basal line of dots into dashes), an effigy pipe (the bowl being the open mouth of a snake, similar to the figure in First Archæological Report, p. 23). The fragments of stone pipes found show also attempts at animal and human designs. At some little distance from this site a bonepit was once found. It probably belonged to this site, although it is unsafe to conclude definitely, because there are other sites within moderate distances of the pit. In 1892, or thereabout, Mr. T. F. Milne, who then taught the Marchmont school, made some little examination of this pit, but found no remains of any importance. There were no whole skulls, and the other bones were saturated with water or otherwise decayed. Altogether, the information gleaned from this pit has been too insignificant to add much to our knowledge; yet, the pit may have been opened many years ago, as the late Wm. Smith, who lived on the next farm north (father of the present occupant, Henry W. Smith), was aware of its existence.

iv.

At the extreme south-west corner of lot 3, concession 2. beside Bass Lake. William Jackson. On a terrace in Mr. Jackson's field the usual pottery fragments and other relics are found. Gouges and arrowheads were numerous. Also on the higher hill eastward, some remains appeared. Beside the road, which passes along the shore of Bass Lake here, some of the immense boulders have mortars on their tops. No iron, or other relics of European make, are reported for this site, although some are said to have been found in one of the bonepits. Part of this site occurs over the line of the adjoining farm, viz., the west half of lot 4, now occupied by Julius Crockford. In the latter farm, there was a large hole in the clay hill, supposed to be the place where the clay for pottery was obtained, as pottery fragments were numerous round about. This hole, the late Richard Rix, who formerly occupied the farm, filled in when he found it. George Rix, now of Orillia town, formerly occupied the farm of Mr. Jackson. On the same farm, some distance north from the easterly end of Bass Lake, R. J. S. Drinkwater discovered a bonepit when the place was in woods. The date of finding this pit was September 8, 1868, as Mr. Drinkwater finds by his diary, which he was kind enough to look up at my request. His knowledge of the surface indications of such pits he had obtained from his grandfather, the Rev. Geo. Hallen, of Penetanguishene. A year or two later, while a camp-meeting was in progress beside Bass Lake, some of those who attended the meeting dug out the contents of the bonepit, which Mr. Drinkwater had left undisturbed. Its position was near the Coldwater road. The late Capt. Peter Lyon, who saw it at that time, informed me that it had a diameter of about twelve feet. Some brass kettles, clay pipes, etc., are reported to have been found in it. When the curiosity-seekers dug out this bonepit, at the time of the camp-meeting, a doctor who was present put together the bones of a skeleton for the edification of the spectators, thus combining anatomical recreation with divinity. A second and smaller bonepit was found near the larger one.



## v.

On the west half of lot 5, concession 1. The Basil R. Rowe homestead, now occupied by Chas. H. Rowe. The site is on the lower ground near Bass Lake, and extends across two fields. Pottery fragments, pipes, etc., were found at it, especially a number of years ago. Many stoneskinners,\* and French (iron) tomahawks, have been found all over the adjoining fields. Dr. Tache got some of the relics from this site when he carried on his archæological explorations some forty years ago, and these are probably in the Laval museum in Quebec city.

## vi.

On the west half of lot 1, concession 4. Edward Turner. He has found a few relics of the usual kinds, but the village was small. Iron tomahawks have been found in the neighborhood of the site, but none immediately at the place itself.

## vii.

On the east half of lot 1, concession 4, Richard Vanderburg, sr. This place is situated on the east side of a part of Silver Creek, one of the branches of North River. There have been extensive ash beds and refuse heaps, mixed with clay pottery and pipe fragments, but the ground is all cultivated now. Archibald Fyfe, of North Orillia, once owned this farm and lived on it for a length of time. He found various relics while here. Edward Turner, now owner of the west half, also cultivated this land and observed the remains. Iron tomahawks have been found in the neighborhood of the site.

## viii.

On the west half of lot 1, concession 6. Mrs. Emma McPhie and family, who occupy this land, find in their field south of the residence an important village site, the distance being not far to Mud Lake which is also partly on their land. The late Alex McPhie found many relics here, including a few iron tomahawks; and his brother, J. W. McPhie, now of Epworth, B.C., also made a collection at this site. These were purchased in 1884, by Mr. George W. Dryden, of Whitby, Ont., in whose possession they are still preserved. In reply to my enquiries, Mr. Dryden informs me the collection he obtained from the McPhie brothers contains ten or twelve pipeheads (clay) some of which represent the following:—Wolf, owl, snake, frog and human faces. There are also some half-dozen iron axes, beads, wampum, bone needles, stone disks, etc. Mrs. McPhie's sons are close observers of this village site, at which there are numerous deep ash heaps. It extends into the land of Mr. Jesse Ryerson (west half of lot 2). It is worthy of note, that arrowheads made from pieces of brass (probably pieces of old kettles) are quite numerous here, and some of them were very neatly formed. Stone and pottery disks were numerous.

## ix.

On lot one, concession 7. George Annis. This lot is broken by Lake Couchiching, at the shore of which high terraces of former lake

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\* See foot note p. 110.

margins appear. On one of these terraces, Mr. Annis has found pottery fragments, pipes, iron tomahawks, etc. There is higher ground beside the site, so it was evidently not palisaded. The occupants of other farms adjoining this one have found stone and iron axes on their lands, showing this was a rendezvous in early times, as indeed we might expect from the fact that there is a cove in the shore of Lake Couchiching at this place.

## x.

On Chief's Island, Lake Couchiching, a few remains have been found. This island has been a rendezvous for Algonkins, both ancient and modern. After the exchange of the Coldwater Tract for the Rama Reserve in 1839, the island became the headquarters of the Chippewas for a time, as its name implies. Relics from an island in Lake Couchiching (probably this island) are in the museum of the University of Toronto, marked thus:—"169, Two large circular silver brooches, one small brooch, three silver buckles, two horn spoons, two small hawk bells, etc., from a grave on one of the islands in Lake Couchiching. T. W. Harris." (Compare these relics with those from Present Island, Report on Tiny, p. 21). See also Sir Daniel Wilson's article on "Cranial Types" in *Canadian Journal*, second series, vol. 2, (1857), pp. 406-435, for measurements of Chippewa skulls from Lake Couchiching.

Some reefs on Cedar Island, in Lake Couchiching, are sometimes miscalled the old "Indian Fort" by a few people, but they are the work of the ice of the lake at a former higher level.

## xi.

On the east half of lot 9, concession 1. William Harvie. Many camps, where ashbeds were as much as four feet thick, were to be seen here, strewn with pottery fragments, pipe fragments, etc. Iron tomahawks (early French make) and other relics have been found. The site covers three or four acres, and is on the opposite side of the valley of the same stream as the next site, and upward of a quarter of a mile from it.

## xii.

On the west half of lot 10, concession 1. David T. Strathearn. Mr. Strathearn, sr., found pottery fragments and other relics at a place near a water supply, as long ago as 1859, or earlier. At later dates, also, other camps strewn with pottery fragments, etc., have come to light on the farm. The relics gathered included two steel knives. About 1888, Mr. Strathearn found a large mealing stone here (or at the next site), but, unfortunately, it was broken in removal. Three large ash heaps, or possibly more, are still quite distinct, notwithstanding the effects of cultivation.

## xiii

On the west half of lot 13, concession 1. This site is on the north bank of Brough's Creek, beside what was known as Edmondson's or Salter's Mill Pond. (This mill pond was broken down by the flood

of June 5th, 1890, and has not been rebuilt). Before 1889, when I first became acquainted with the site, it had been ploughed two or three times, and remains of camps exposed, strewn with pottery and pipe fragments, and other relics including iron tomahawks. At that time the occupant was Richard Frost.

xiv.

On the north-west quarter of lot 10, concession 3. Thomas Day. Near a stream which flows into Shingle Bay. John Sanvidge, now of Magnetawan, lived formerly on the part of this farm on which were remains. During the time he lived here, copper kettles or pieces of them were found abundantly, also iron axes of early French make. Geo. McKinnell, of Orillia town, obtained twelve of these French axes from this site. Two of them are now preserved in the Grierson Museum, in Thornhill, Dumfriesshire, Scotland. Richard O. Bell, Oro Station, obtained two French axes here on which the triple marks were unusually well defined and large, each tomahawk having a distinct pattern. Large ash heaps, mixed with broken pottery, pipeheads, etc., occur here. Mr. J. H. Hammond, Orillia, giving his recollections of the place in the early seventies, says: "It was on the south side of Barrie road, about a mile and a half out of Orillia, on the edge of the old mill pond between the road and the mill pond. This plot or site would be two or three acres in extent, and it was on sandy soil. In the field where the village site was, a great many remains of the Indians, such as broken pottery, pipes and broken pipe heads, skinning stones and quantities of ash heaps and remains of fires were scattered over the ground. The pipes were ornamented by a sort of basket-work pattern around the head of the pipe and near the top. Some of the pipes had stems, others only the pipe-head with a hole for a stem. The skinning stones were all of a green stone, different from any around here, and were all chisel-edged. I recollect two grooved stones. These had a chisel edge and were large, about nine inches long, a half to three-quarters of an inch thick, and about three inches wide with a depression around the centre, apparently for the purpose of holding the handle. The soil of this village site is red sand, and it is on a level bench, about twelve feet above the level of the water of the dam." (The dam in the stream here is known as Thomson's Mill Pond, and formerly as Dallas', from Fred. Dallas, the earliest settler at the place.) About 300 yards to the west of the village site is the cemetery, with which it was probably connected. This burial-ground consisted of single graves, situated on the Cuppage farm (north-east quarter of lot 10, concession 2.) Nearly all, or quite all, of the graves have been rifled of their contents by curiosity-seekers. From all that can be learned, I regard it as a noteworthy archæological feature. In company with Dr. Jas. N. Harvie, of Orillia, I made a visit of inspection to this aboriginal cemetery on June 24, 1889. A tiny stream, emptying into the larger stream, divided the burial-ground into two parts. About thirty holes in the surface of the ground (pre-umably graves) were to be seen on one side, and about ten on the other. A tree whose stump showed about 115 annual rings, and had been fifteen years chopped, had grown out of one of the holes, thus



showing a minimum age of 130 years for the cemetery. Yet, this is much less than the actual age of the graves, as some French tomahawks furnish evidence that they were much older, and belonged to the seventeenth century. The ground at the place is sandy, while surrounding parts are clay and gravel. A little west (not above a quarter of a mile) and slightly higher, is the Algonkin raised shoreline. The surface of each grave was depressed below the level of the ground by sinkage, probably; and thus each grave could be seen. It is now close to Thomson's Mill Pond, but at the time of its use by the Indians it would be at the edge of a swamp. It resembles the Coleman cemetery in Oro (No. 41), and belongs to the type peculiar to the early Algonkins, and perhaps, also, to the Arendarrons, the Huron tribe, who were nearest the Algonkins, and were most influenced by their customs. The graves are said to have yielded a few pipes, (chiefly clay), tomahawks (stone and iron), pottery fragments and stone disks.

## XV.

## THE MOUNT SLAVEN SITE.

Indian remains have been found quite extensively in what is known as the Mount Slaven Annex. This is really a part of Orillia town, but the land is not yet within the corporation limits. On both sides of the Mount Slaven Creek numerous remains have been found. For the most part, the plot in question is a large burial-ground. Whether it was the regular camping ground of the Indians who buried so extensively here, or whether their camps were at some little distance, is not very evident. But it is certain that many ashbeds, mixed with the usual pottery fragments, etc., occur here as well as graves, and the probability is that the aboriginal occupants lived right here and buried their friends close to their dwellings. The remains have been found within the space enclosed by the Fourth Line of South Orillia and O'Brien Street on the west and east respectively, and by Mississauga and Lavicount Streets on the south and north respectively. Within this rectangular block is enclosed a space of about 68 acres. Graves and other remains cover about half of this area, which is now partly covered with houses and gardens. Placed as it was on lower ground than anywhere else around it, and occupying both sides of the creek, the sheltered position of this site would make it a desirable wintering spot; and I incline to think it was used for this purpose for a long period. The mixed character of the relics found here tends to confirm this view. For example, French iron axes of the pattern belonging to the seventeenth century, as well as pipe-tomahawks (steel) have been found on the site. The latter are not found on early sites, but occur on recent camping grounds; and they are to be regarded as belonging, not to the French period of Canada, but to the early British period, that is, after 1759. It is probable this camping ground was used in both periods. The settlers in the Mount Slaven suburb find many iron and steel tomahawks of both the aforementioned kinds.

Besides the series of isolated or single graves, which have been thoroughly ransacked for relics by curiosity seekers during the past

forty years. there were at least two communal ossuaries or bonepits. The first of these was found about the year 1870, on or about lot No. 212, south of Mary Street, and thirty or forty yards from the creek before-mentioned. Very few buildings were in that part of the town at the time. A pine tree had partly grown over the pit. A large number of skulls and other human bones were found in it.

A smaller communal grave came to light in September, 1902. Mr. Harry Willey was levelling up his lot on the north side of Mary street, and came across a number of skeletons, ten of which were together, the skulls occupying the small space of two square yards. Particulars of the discovery appeared, at some length, in the *Orillia Packet*, of October 2, 1902. The character of the deposit of bones indicates that the communal idea underlay the placing of them together. At a former time some beads and tomahawks were found with a few other skeletons some yards nearer the street; and again, in August, 1903, Mr. Willey found an earthen pot (Indian make, complete) beside some other skeletons.

As to the question of what kind of Indians inhabited this site, Mr. C. A. Hirschfelder once informed me that he made openings in a few of the single graves some years ago, and obtained some European relics. He concluded that the burials he saw had been of later Algonkin origin. On the other hand, Mr. Lawrence Heyden, Toronto, stated to me his opinion that this was a Huron site, giving as his reason the occurrence of a communal grave, out of which he took no less than 38 tibiæ (shin-bones). This implies that the communal bone pit was a Huron institution only. Perhaps both gentlemen are correct in holding these divergent opinions, as I have mentioned above, the probability that the site was occupied by Indians in widely different periods. Mr. Heyden communicated to me some facts bearing upon these burials, as follows:—

"The ossuary or rather series of ossuaries found about quarter of a mile west of the Orillia Town Hall, contained copper kettles, remains of blades of knives, pipes, pottery as well as stone beads, etc. So any village in the vicinity of these ossuaries must have been populous and post French (that is, after the French arrived in the country, and not after they had quitted the district, when the Hurons dispersed). Hatchets and other remains are frequently found scattered within a pretty large circumference of which these ossuaries might be taken as a centre."

Some persons have advanced the theory that this site was Cahiaque, the town from which Champlain set out in 1615 on his expedition to the Iroquois. The characters of this site forbid the theory, even if we had not Champlain's explicit statement, that Cahiaque was three leagues from Lake Couchiching. In the first place, the relics found here indicate that the site was inhabited at widely different times, which would account for the large extent of ground strewn with remains. Yet, large as the site is, it is doubtful whether it could be the spot on which the 200 cabins of Cahiaque were placed. And still further, it lacks a defensive position, which was essential for a large village or town like Cahiaque. It occupies flat land, with higher ground on two sides of it, and is on both sides of the Creek. A position of this kind was anything but defensive, according to our

knowledge of what other fortified villages are like in the matter of position. The site was probably Algonkin, both early and modern, and not Huron.

While preparing these descriptions of sites, I was favored by Mr. J. H. Hammond, of Orillia, with the perusal of some notes on this site, written by him to preserve some record of the place, as its present condition scarcely admits of making a definite account, owing to the presence of so many buildings. Mr. Hammond has granted my request to publish the following extracts, a favor that will be appreciated by students of archæology and history generally, as there are but few left who witnessed the exhumation of the most important part of the remains about thirty years ago. Mr. Hammond, whose remarks on the orientation of the burials, and other mortuary practices of the Indians who deposited the remains of their dead here, are very interesting, says—"In the early seventies, as a schoolboy, I spent the greater part of some Saturdays and holidays with my playmates in excavating Indian graves on the lots north of the extension of Mississauga street, on Mount Slaven, near Orillia Town. Our schoolmaster (Samuel McIlvaine) urged us to make all available collections of any objects such as beads, wampum and the like. He was making a collection, and utilized our muscles in furthering that object. It was then called the Indian graveyard. These excursions lasted over three years, and were pursued by us every convenient Saturday during the summer seasons.

"The graves were single and extended in (four) lines from the bank of the creek toward the hillside at the Coldwater Road, in a north-westerly direction. All of the bodies were buried in a sitting posture, facing the east or morning sun. In every case we came on the skull first. The hands and arms were always in front of and crossing the leg bones.

"In only one case were there more than one body in a single hole. In this case the bodies were laid flat, head and feet regularly. This hole was oval, about fifteen feet long and seven or eight feet wide, and placed between the second and third lines of graves, twenty or thirty yards from the bank of the creek. In this big grave we found a large quantity of wampum about the size of a ten cent piece, with a drilled hole in the centre of each piece; some round blue beads; and some red beads of a bugle shape, an inch to an inch and a half long, pierced like the others. Also, a quantity of flint arrowheads and spear heads. No iron axes that I remember, though we had plenty of them from the neighborhood.

"In only one case was any kettle found, and this was southeast of the big grave, on a level place about half way down to the water edge. It was upside down and under it was a large quantity of thigh bones, which were in no case broken. These had been boiled or were in the process of being boiled when the kettle was upset and the fire put out by the liquid in the pot. On top of this pot a big pine stub was standing, and the main root of the stub ran down in the earth until it reached the bottom of the kettle, and then grew around the surface of it. This stub would be at least two feet through, and we had to cut through the big root to free the kettle before we could get it out of the hole. Underneath the kettle and bones, as above



described, were the remains of the fire, some of the wood partly burnt, some burnt to coal and some to ashes. This kettle was brass, and had holes for the bail. The rim was flared, and was of the same material as the pot itself. It was about two and a half feet across the top and about twenty inches deep. The bail holes were about an inch and a half in diameter, and about half an inch from the edge of the pot. Inside of the pot was a collection of green matter, hard and sticking fast on the pot when we found it. The surfaces of the bones were of a brown yellow color; no marks upon them. Underneath the kettle the ashes were bright and clean; no trace of any rotted flesh, only pieces of charred wood and coal and ashes underneath the bones.

"The graves were in a succession of lines about twenty feet apart each way, and apparently followed a fixed plan of burial. There were, at least, four lines of graves, (possibly more), and they extended through the sand (a coarse grey and well-drained sand) to the gravel under the hill at the Coldwater Road. The ground was nearly level, having a slight upward trend toward the Coldwater Road or Trail, a distance of a quarter of a mile or more. The ground had at one time been cleared of trees, for the trees were nearly all of one size, viz., about a foot through, while the woods on both sides of the graveyard were larger and contained pine trees, some large, others smaller. There were a few butternut trees along the edges of the graveyard, but none on it. The spring creek, which ran to the east and south, had cut a channel from fifteen to twenty feet deep below the level of the graveyard, and it was at this time a running stream all the year round.

"One of the graves that we excavated was of an exceptional character, as the bones were of an enormous size. The skull was intact, with the exception of a break in the middle of the crown. This was two or three inches long, and about half an inch wide, apparently made by a blow with a blunt axe or pointed stone. The cut ran from the back toward the front of the skull, and was widest at the middle of the cut tapering to a point both ways. The lower jawbone of this body was in place, and I tried it over my own head and face, and it passed clear of my face, without touching it at any place. Our schoolmaster measured the thighbone of this body on his own leg, and it extended beyond his knee several inches, and he was a tall man, too. We found in this grave a quantity of hair, black and long, apparently attached to what we then thought to be a scalp. This was on the knees of the body. I also got out of this grave a black amulet shaped like a bird, which had apparently hung on the breast of the man in life. It was of stone, polished and perfect. We also got some flint arrowheads out of this grave, but nothing else that I can recollect."

On the west half of lot 6, concession 5. In the north and highest part of the Town of Orillia, numerous remains have been found along the brow of the Algonquin shoreline. The relics found on this high ground site belong more distinctly to the early Huron period than do those of the Mount Slaven site. The Huron forest-

trail appears to have passed along the brow of the ridge here. The following list of some of the remains found is only a partial one:—In the woods on a lot belonging to Lawrence Heyden, Toronto, east of the upper end of Peter street, partly within the town limits, there were found several hatchets. At another place in the vicinity of the same, numerous pottery fragments were found, at a short distance from a spring, as Mr. C. H. Hale informs us. On a lot on Matchedash street, sold by Lawrence Heyden to the Rev. Mr. Creighton, there were found, on clearing off the surface stones, a human skeleton with a hatchet (French, of the early Huron period) lying beside it. In the spring of 1903, F. Webber, lot 25, North Borland street, found a string of wampum (55 beads) while digging a celery trench in his garden. C. E. C. Newton, Esq., found in his garden on Borland Street, near the High School, in August, 1903, a fine brass crucifix, 5 inches long and well preserved. In the *Orillia Packet*, of July 16, 1903, A. C. Osborne describes a St. Bartholomew medal, bearing the date August 24, 1572, which W. J. Powley found near where the Coldwater road ascends the ridge. All these finds, and many other similar ones, in the highest part of the town, indicate an extensive occupation and travel here, in the early period.

## xvii.

On the old Asylum ground, now the Park, in the town of Orillia (parts of lots 7 and 8, concession 5). This was a prehistoric site or landing, as well as a noted camping-ground for Indians as late as the time when the first settlers came to Orillia. Iron hatchets have been, and are being turned up.

## xviii.

On the west half of lot 21, concession 1. William Anderson, Members of Mr. Anderson's family have found stone axes, clay pipes, pottery fragments, an iron tomahawk, etc., at a place near their boat-house. One of the pipes was of the belt pattern, an early Huron type. The site is at the west end of the portage across the neck of land at Carthew's Bay. The Indians use this portage to the present day, the trail passing across the neck on the north side of the swale which occurs there. Modern Indians carry their canoes across this neck of about 25 rods, rather than paddle round the point (Eight Mile Point), a distance of more than a mile around, and also exposed to winds. The evidence at hand also shows that Indians at a very early period preferred to do the same.

Local newspapers of June, 1888, mentioned the finding of a human skeleton (supposed to be an Indian's) with coins of about the year 1800, at what was called Cameron's Point, two miles to the eastward of this portage. The action of the waves had washed the skeleton partly out of the bank where it had been buried. It proved, however, to be the remains of an old trader, who carried on his traffic among the Indians at an early date. When he died they buried him in his old butternut canoe. There were brass buttons on his coat by which the remains were identified.

## xix.

In the central part of lot 12, concession 3. Now the grounds of the Provincial Asylum for Idiots, near Orillia Town. The position of the place is at the north-west part of Shingle Bay, where the land rises high above the lake level. There was a landing here in the time of the aborigines. The late John Burkitt lived here in former years and found numerous relics, especially many pottery fragments, etc. Mr. Burkitt's name appears in early Assessment Rolls (1858 and later) as owner of the whole of lot 12. And Mr. C. H. Hale informs me this was known as Burkitt's farm after 1868.

## xx.

On part of lot 11, concession 6. F. S. Smith. Numerous relics have been found on his farm, which is on the shore of Monk's or Smith's Bay. A favorite landing-place of the Indians existed here from early times. Metal tomahawks have been found, indicating the occupation of the place during historic times; but there have been also relics found of prehistoric dates. Several years ago, on the narrow tract of land between the two lakes (Simcoe and Couchiching) many stone axes were found. The place was near the Atherly Road, on the way to Invermara, and also near the bay just mentioned.

## xxi.

At Invermara, in the grounds of Orchard Point House (summer resort), formerly the Red Cross Hospital, which is the property of Mr. J. P. Secord, Orillia. A paragraph appeared in each of the three Orillia newspapers of May 1, 1890, mentioning the finding of a human skeleton, with accompanying Indian relics, and also other articles in the vicinity of the find. There were numerous prehistoric, as well as recent relics, the remains thus belonging to all periods from the earliest downwards. Beside the single skeleton (apparently a woman's) there were some stamped out metal ornaments; three brooches, a double-barred silver cross, about four inches long, with "Montreal" and the maker's mark upon it. At a little distance away were found fragments of roughly ornamented pottery, clay pipe heads, stone axes, a bone disk, etc. The relics found with the skeleton indicated that it belonged to a comparatively recent period; but the clay pipe-heads and fragments mostly belonged to the early Huron period. The latter included a Huron flared pipe (plain), six belt pattern pipes, and five images from pipes (an owl's head, a hawk's head, the head of another bird, a nondescript image, pig-nosed or wolf-nosed, and a human face). The foregoing relics indicate various periods of occupation of the site, as we might expect from the fact that the fishing station at a little distance north, and, in fact, along the entire length of the Narrows, attracted Indians thither at all times.

## xxii.

## FISHING STATION AT THE NARROWS.

Remains of the fishing station and fish weir of the Hurons at the Narrows. The position of the old weir is north of the present bridges and south of the old railway bridge. In 1887, the late Joseph



Wallace, sr, a local archaeologist, of Orillia, identified this as the fishing station mentioned in Champlain's Journal (1615), at the time when he had extracts from that Journal printed in the *Orillia Times*. (See Champlain's Works, Vol. 4, page 34). Mr. Wallace also contributed an article on the subject, to *The Canadian Indian* (Sault Ste. Marie, Ont.), and it appeared in the issue of that periodical for February, 1891, pages 134-138, under the heading "A Fishing Station of the Ancient Hurons Identified." Owing to the rarity of that publication, it is worth while reprinting here Mr. Wallace's words in reference to the fish stakes. After some general remarks on the object of Champlain's expedition, he says ;—

"The Narrows presents much the same features as in Champlain's days. But its fame as a fishing ground has long vanished ; bass may still be caught with the rod, or trolling ; and in the winter season, some scores of Indians and whites may be seen spearing herrings through holes cut in the ice. Still, there is no doubt that at the time to which reference is made, all those lakes were literally swarming with fish. Are there any remains to point out the exact locality where these stakes crossed the strait ? In answering this question in the affirmative, I would state that some years since, my friend Gilbert Williams, an Indian, informed me that he had seen very old stakes which were used by the Mohawks for catching fish. Some time after, when I was writing out the story of Champlain for one of our local papers, I was conversing with Charles Jacobs on the subject, who said he had also seen the stakes, and further, that the locality was known to this day as "mitchekun," which means a fence, or the place which was fenced or staked across. He said that if a strange Indian were to ask him where he came from, he would answer, "mitchekuning," the termination "ing" signifying "from," that is, from Mitchekun. We were, at the time, standing on the Orillia wharf, and within sight of the end of the Narrows. Charles Jacobs said, ask old Mr. Snake (who was standing near by), where Mitchekun is. As soon as I asked the old man, he turned and pointed to the Narrows, which was between two and three miles distant. In September, 1886, I walked down to the Narrows, and entered into conversation with Mr. Frank Gaudaur, who is of Indian extraction, and the keeper of the Midland railway bridge, who immediately took me to the side of the bridge, and only a few paces distant, and shewed me a number of the stakes which remained. Dredging the channel for the purpose of navigation had, of course, removed the greater part of them, only those on the outside of the dredged portion being left. Mr. Gaudaur said that there were some other places where stakes might be seen, but that this was the most complete part. The stakes as might be expected, were a good deal twisted by the current, but the ends were still close together, and firmly embedded in the clay and mud at the bottom, so that it was only after considerable pulling with a spear, that one was brought to the surface. The stakes would be about five or six feet long, and thicker than a walking stick. It is to be observed that they are not placed across in a straight line ; indeed, one portion is continued in a direction half-way down the stream, and would thus produce an angle when the line was changed upwards, and at the opening of this angle would be placed the net ; and this is in exact accordance with the

method which Champlain describes, when the Indians were hunting deer; that is by staking out a large space in the woods, with an angle into which the game was driven. It is not difficult to account for the stakes lasting for so many years when we consider that the tops were under the surface of the water, thus escaping the action of the air, and also that of the ice, which in this locality is never of great thickness because of the rapidity of the current. It must be understood that we do not assert that these identical stakes existed there in Champlain's time, although it is possible that some of them may be part of the original construction. It was probably used for fishing purposes long after the time of Champlain, and even after the destruction of the Hurons, for I am strongly inclined to suspect that a portion of the Mohawks settled down on the vanquished territory, and remained there a considerable time. If such was the case, the fence would be repaired from time to time, as circumstances required, without altering the site to any material extent. The stake which I had, had been pointed with an axe of considerable sharpness, as evidenced by the comparatively clean cuts made in the operation. Our present Indians, who are Ojibways, know nothing about them, except the tradition before mentioned. Mr. Snake is an old man, and he stated to me that the old Indians, when he was young, referred the whole construction, and its use, to the Mohawks. I have no doubt, if they are not molested, the remains will be in existence a century hence."

A paragraph in the *Orillia Packet* of June 21, 1889, affords some further information upon the important fishing station:—"During his stay here, Mr. A. C. Osborne, of Penetanguishene, accompanied by Mr. Joseph Wallace, sr., visited Mr. F. Gaudaur, and they made a most interesting discovery. A copy of Champlain's journal describes the method by which the Indians took fish in 1615. They had rows of stakes driven into the bottom of the Narrows, in such a way as to corral the fish in passing from one lake to the other. In this manner enough fish for the commissariat during the expedition in which they engaged against the Iroquois, were taken in five or six days. When this part of the journal was read to Mr. Gaudaur, he took his visitors to where the rows of stakes could be seen under water. The Ojibways, he said, found these stakes there when they came a hundred and fifty or eighty years since, knew what they were for, but did not use them. They were in large numbers, and at one time extended quite across the Narrows, but very many were thrown out in dredging the present channel. The stakes are of tamarac. Mr. Osborne secured two—one had evidently been put down to replace another at a date subsequent to the other, which was soft, like cheese, when pulled out. The top is desiccated, and is covered with slime. Though only some six inches were visible they extend a long distance into the mud. Mr. Osborne believes that the older stick is one of those there when Champlain encamped at the spot. Mr. Gaudaur says that these under-water "fences" probably suggested the Ojibway name of Orillia, or the Narrows—Michikaning; "The Place of the Fence."

Following the publication of the foregoing paragraph, the present writer communicated a letter to the *Orillia Packet* of July 5, 1889, suggesting that the early French name of Lake Simcoe, viz., Hurdle

Lake, (Lac aux Claires), was derived from this fishing contrivance at the Narrows. C. C. James, M.A., made a similar suggestion in a letter to the *Toronto Globe*, May 26, 1896. And in a letter to the *Orillia Packet* of April 2, 1903, Aubrey White, Deputy-Minister of Crown Lands, Toronto, also suggests, or rather points out as an established fact, (though without citing any authority,) that the early French adopted the idea of the name Hurdle Lake from the same Indian fish fence. These three suggestions appear to have been made independently of each other, making the validity of the suggestion very strong. [See also Gen. John S. Clark's article in Ontario Archæological Report for 1899, p. 195.]

A. F. HUNTER.

BARRIE, December, 1903.

### IROQUOIS IN THE NORTH WEST TERRITORIES.

In the last Report on Indian affairs issued by the Hon. Clifford Sifton, Minister of the Interior, Ottawa, a reference was made by Mr. James Gibbons, Indian agent, at Edmonton, Alberta, to some natives known as Michel's Band, the original members of which were said to have come from Quebec. The statement was singular enough to arouse some curiosity, for although instances are known respecting the appearance of individual Indians, hundreds, or even thousands of miles away from their original homes, it is quite unusual for these people to remove voluntarily, in a body, so far away as Alberta is from the Province of Quebec.

A letter of inquiry addressed to Mr. Gibbons, respecting the statement, brought a note from him to the effect that "the members of Michel's Band are the children and grand-children of two brothers Michel and Baptiste, who came originally from near Montreal" (probably from Caughnawaga) and, that as he was about to visit the band in a short time, he would try to procure more detailed information, and let me know the result. In accordance with this promise Mr. Gibbons has very kindly written the following interesting letter :

INDIAN AGENT'S OFFICE,  
EDMONTON AGENCY, NOVEMBER, 24th, 1903.

DEAR SIR,—I am now able to give you some information relative to Michel's band and their connection with the Iroquois Indians of Eastern Canada, about which you asked in your letter of July 24th last. Chief Michel Callihoo, now an old man of over seventy years, says his father came to this country at least a hundred years ago. He can remember his father saying, that his tribe lived across the river from Lachine. As he was speaking to me through an interpreter, this may be looked on as settling the locality of the band, the name of Lachine not being at all familiar here. The Iroquois name of his immediate family is Carr-e-heoo\*, and is trans-

\*I have submitted this word to the judgment of Mr. F. O. Loft, an educated Mohawk, in the Ontario civil service. He agrees that the meaning of the word is correctly given, but suggests that the spelling should be Kal-he-yoh, or Kar-he-yo, Gar-he-yo. In pronouncing the word there is a semi-guttural at the end of the first syllable, which Mr. Loft thinks is best represented by l. The usual difficulty occurs in this word as to k, and hard g, when pronounced by an Indian.



lated A Fine Forest. Some twenty-five years ago he met some of his tribesmen from the East, who told him that many of his name were still there and that his cousin of that name was chief of the Wolf tribe of the band. The party who immigrated to this country consisted of about forty men, no women coming. They had learned, he said, that fur-bearing animals and game were abundant, probably from Hudson's Bay Company's people. Arriving here they appear to have connected themselves with one of the fur companies, of which he says there were three. In pursuing their calling they appear to have ventured out on the plains, an act of temerity that cost the lives of eighteen of their number at the hands of the Blackfeet who then ruled the plains. After this disaster, the majority appear to have gone up to the Jasper Pass country, and though I hear of them occasionally, they are outside my field of enquiry.

The father of Michel entered the service of the Hudson's Bay Co. as a boatman, and in that calling made trips as far east as the Lake of the Woods. He married a French half-breed woman. I can only find that he and one brother left any descendants here. Thirteen families, numbering sixty-six individuals, can trace descent from one or other of these brothers, and, as no women came with the original immigrants, it is obvious that the Iroquois blood in this generation is attenuated to the vanishing point. They have lost their language, and if they retain any tribal characteristics they have become so feeble that the ordinary observer of Indian manners is unable to discern them. In appearance, habits and social status, they are undistinguishable from the half-breeds of the country.

This is the book of the Lost Tribes compiled by one unaccustomed to ethnological research or historical analysis, and, while it will not add much to the sum of your Indian lore, it may supply you with clues to prosecute a more satisfactory enquiry.

Yours truly,

JAS. GIBBONS.

### THE KILLING OF MOOSTOOS THE WEHTIGOO.\*

During the winter of 1898-9 a band of Cree trappers camped at Bald Hill, on Smoky River, about 75 miles west of Little Slave lake. This band was under the leadership of Entominahoo, who, although not a "chief," was looked up to as a Medicine Man of considerable authority. Other members were Chuckachuck, Napaysoosee, Napay-sis, Payoo, Moostoos or Louison, Mihkooshtikwahnis, Apishchikisaynis, Little Felix, Mikisyoo, Kunuksoos, with their families, all of whom were accommodated in two shacks, and four tepees.†

Towards the spring of 1899 several of the band became sick. One of these was Moostoos, who convinced himself and others that he was about to become a Wehtigoo, or, what is known among Algonquin

\*For the Court copy of the evidence from which the extracts are taken, thanks are due to Mr. John R. Boyle, of the firm of Taylor & Boyle, solicitors, etc., Edmonton, who very properly regarded the evidence elicited as likely to prove interesting to ethnological readers.

†Shacks, roughly built houses—tepees, wigwams or tents of cloth, or of skins.

tribes farther east as a Wendigo\*, or, Wentiko, which is, to, say, "one possessed." He declared that when the change came he would kill his children and "clean out" everybody else, unless his friends would first put an end to him. This they did, and what follow are extracts from the evidence given by the men and women of the band at the trials held at Fort Saskatchewan and Edmonton, Alberta, in connection with the case, which is, perhaps, unique in British jurisprudence.

Nothing presents more difficulty than the *extraction* of information on any subject, even with the assistance of a good interpreter; from Indians, so strong is the tendency on their part to offer such replies as the nature of the question seems to suggest to them.

The extracts being presented here as an ethnological, and to some extent, as a psychological contribution rather than as a legal one, they are not given in the order of presentation at the courts, and, for the same reason, by far the larger portion of the evidence is omitted.

The first court was held at Fort Saskatchewan, and the second at Edmonton, so that some of the witnesses were examined twice, but the variations as well as the agreements in their evidence, are not only interesting but edifying.

## QUEEN vs. PAYOO AND NAPAYSOOSEE.

### — CALLED BY CROWN.

ELIZA (Kunuksoo's wife), said:—

Last saw Moostoos near Bald Hills. Was not quite dead when I saw him. Do not know if anything was the matter with him. He was in a shack. Do not know if others were there. I was not well. I was in the shack when he first took sick. All at once he told the people that he was going to kill them all that night. People there were 1, Entominahoo; 2, Kunuksoos; 3, wife of 1; 4, wife of 2. Don't know who else. Was too scared that Louison (Moostoos) was going to kill them. I am cousin of deceased. Payoo is my relation. Napaysoosee is my cousin. He (Moostoos) was moving all the time and a lot of them holding him down. He was lying down. Holding him were Napaysoosis, Chuckachuck, and I myself holding him by leg, and praying at same time. Mayaskwaysis holding other leg. He was trying to bite Napaysoosis. Payoo then struck him. I saw Payoo coming into the shack while we were holding him down. After Payoo struck him I went out. Struck him with an axe. Don't know what part of the body; was not looking. Saw him swinging the arms to strike. I did not hear anything said. Deceased said, "You will all die to-night if you don't kill me first." Don't know of him saying anything else. Don't know if he cried out when struck. Don't know how long Moostoos was sick. Don't know how old Moostoos was. Did not belong to the same band. Came from Sturgeon Lake. Napaysoosis used to be at Sturgeon Lake. Don't know where Payoo belonged.

ENTOMINAHOO said:—

I am not chief, but am recognized as head man. Deceased came in winter. Not sick when came. He was a fine man, and all of a

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\*This name is applied to the "spirit," as well as to the affected person.

sudden we took notice of something wrong with him. Just about the time this happened, he said, "there's going to be something wrong with me." He said, "If I go wrong you had better kill me so that I may not do anything to my children."

Then in the evening we saw that he was thinking something wrong about us. After he said that, he was moving about and I took hold of his wrist to quiet him, and he threw me off like a child. In this form of sickness they struggle very hard. Got hold of him by one arm again to try and hold him and sat down beside him. Payoo was not in the house at the time. Napaysoosee and Chuckachuck wanted to hold him down by the shoulders. Then Payoo came in. I did not notice him come in. I was sitting close to his feet. Saw Payoo strike deceased with an axe. Don't know where he got it. Can't say where he struck him. I think in the head end of the body. Saw the axe falling but not actually strike. Saw it strike, but was dark in there and could not see just where it struck. Saw no blood. Moostoos nearly got up after the blow. After that Napaysoosee struck him on the breast with axe. Could not say which side, or whether in back or front, same axe. He was quiet then, and we all went out soon after and went to other house. Napaysoosee came running to house where I was about noon next day, and said "That man is moving—is rising up from the ground." I went there and saw. A blanket was over the body, and legs were all I saw, as he did not move; if he had, we would all have died of fright. Did not lift blanket. I saw Payoo tie deceased's legs to pickets and with trap chains the night of killing. It was not the chains that caused the swelling but the evil that was in him. Left body there and came away, shutting the door. The whole party went to Lesser Slave Lake, think the same day, but not sure, and on the way met Corp. Phillips and reported matter to him. Napaysoosee and Chuckachuck went back to camp with Phillips. My wife, Eliza, and Felix's wife were there. Kunuksoos and wife not there. I was sitting much of the time with my back to deceased, and may have missed seeing what women did. I saw Eliza striking him with a cord. Did not see other women do anything. I did not hear deceased say anything while we were in there. I was afraid he was going to kill us. The reason I was afraid is, because we hear from all over often that a person like that cleans out the whole of the people, does not leave one. The man was going to be a Wehtigoo, look what he said about his own children. I never saw a Wehtigoo before, but that is what I have heard. We had nothing to tie up a man with. They say that a Wehtigoo is immensely strong.

MARIE, wife of Entominahoo:—

Was in shack, saw Payoo strike deceased with an axe. Chuckachuck struck him too with an axe. Napaysoosee too. Don't know if the women struck him. All struck him towards the head. Did not see where Payoo struck him. Payoo struck him. Chuckachuck next. When Chuckachuck struck, Napaysoosee was standing towards deceased legs at left side, far side from door, and was standing in same place when he himself struck. Moostoos said, "I'll make an end of you all to-night, if you don't kill me." Chuckachuck and Napay-



soosee both holding him on left side, Eliza was towards the feet standing. Eliza whipped him. Could not say exactly how often, twice certainly on the breast, being then standing at his head. Did not see Felix's wife doing anything to him. It was Payoo killed him. Chuckachuck struck just once after Payoo. Napaysoosee struck some time after. Deceased stopped moving after Payoo struck him. Chuckachuck struck for nothing. I was so afraid I did not know whether I was alive or dead.

NAPAYSOOSEE said:—

It was on Smoky River, one day's march from Lesser Slave Lake where this occurred. Apart from deceased there were thirty-two people there, last March. Had been there all winter. Two small houses and four tepees. All were Crees. Deceased's (whiteman's) name was Louison, about 40 years old or a little under. He was a Beaver. He came there about the middle of winter from Sturgeon Lake, a little after the New Year. He spoke Cree. Always good friends with him. Louison's wife and children were with him there. I and other prisoner, Payoo, are both baptized Catholics. Some of the band were not. Those who were Catholics went to Lesser Slave Lake to church. Some were Pagans and did not. Moostoos had three children. Moostoos lived in a shack and his two brothers-in-law with him, both married, named Chuckachuck and Apishchikisaynis. Each had one child. Three men, three women and six children in the house. We had no chief, but an old man named Entominahoo, "The little Hunter" was looked upon as our leader, through the Hudson Bay Co. He was a Pagan.

About 5.30 one day Moostoos would not eat. It was not yet dark. He was acting differently from what he ever did before. He wanted always to see me and to be with me. At last he would not speak to me at all. He was excited and seemed to float above the earth. The last time he spoke to me, no one had done anything to him till then, and there was nothing to keep him down, he said to me, "This night all of you in this house are going to die." He had been getting worse all day long. I took hold of him with Chuckachuck and two women, and held him down. He tried to bite me in the arm, but only tore my clothes with his teeth. One of the squaws named Eliza held him by the leg. She took two cords from her girdle and struck him in the face with it. The other woman with a file stabbed him in the breast. His brother-in-law struck him in the face with a hatchet. When struck in the face by the woman, the blood came from his face. After being struck with the hatchet he did not move. I then took the hatchet and struck him in the right side, but not hard, and also with the knife in the bowels. After the woman struck him with the cord, he was breathing very hard, and then the blow of the hatchet broke in his head. The reason we struck him was because he had threatened to kill us all. It was to save our lives. We were all foolish with fear. Next day they told me to cut off his head or he would come back. I refused, but at last I consented and said if you are not afraid of causing me to die when you force me to do that, and I did it. It was in the house where he was lying. A number were there and saw it done, but I alone did it. They told me to fasten his legs

with a chain and I did so. We were all crazy with fear, and when we found out what we had done, we left the place and left him there. I drove a stake through the hole where I had struck him in the side with the hatchet.

Moostoos said at Sturgeon Lake he was going to turn Wehtigoo, and we had heard this and were afraid of him. It is our law to kill a Wehtigoo. Moostoos had said to his wife, "I am going to go Wehtigoo, I don't want to do anything to my children, it is better that they should kill me."

Napaysis being sick, the men all were sitting round Napaysis, and Moostoos was there. He was not then sick at all, and all at once he commenced to speak of all kinds of things. He looked all around and said, "How would it do, if I should eat the little ones, and especially their noses?"

Among our own band I never saw or knew of a Wehtigoo kill and eat any one, but I have heard of it often.

While Moostoos was bad sick, he floated up right off the ground, and when I caught hold of him, it was hard to reach up to seize him. He was very strong, and we had hard work to get him down and hold him down. He was a small man.

NAPAYSOOSEE said :—

Cannot understand why the others swear that Payoo struck the first blow. It is not true. Eliza ran a two-pointed iron instrument into Moostoos' leg the next morning, after he was killed. At the time she whipped him in the face, she had in her hand besides this cord, an axe. She was singing and calling out. Eliza struck him often over the face with the cord, and I saw the blood come through the blanket which was over him. I saw Eliza next morning burning the cord to ashes with which she had struck him. The one she showed in Court was not the same one at all. Mihkooshtikwahniss was making medicine and trying to make him well, but he could not manage him, he was too much for him and I sent him out of the shack. There were small sticks planted and the men and women were singing, making medicine all but me, I was not. We were all sitting there all night after he was killed. I took his head off with an axe on the next day. It was not daylight yet when Entominahoo's wife poured hot tea into his breast. Don't know who put stone in of which you say Payoo speaks. Don't know of it at all. Payoo and I helped another to drive in the stake. Entominahoo was the chief medicine man of the band. The tying of the legs to the stake was done by me and Entominahoo's wife. She tied one and I the other. This was before daylight. The tea was brought from the other shack in two small kettles. Think it was Entominahoo's wife who suggested it. All the day before I thought there must be ice in him to make him sick that way. I thought that if the ice was allowed to stay there, that the evil spirit could not be killed out, and I suggested the hot tea.

The other man, Napaysis, was going that way too, but he was sick weak, and it was not hard to subdue him, but we could not do anything with Moostoos. I think it was Chuckachuck who called

out "Come and see this here." Eliza handed the axe to Chuckachuck that he struck with, but she may have struck with it first, although I did not see it.

PAYOO:—Statement made May 6th and 15th.

I was in the shack sitting with the women, when they called to me, I went to the house where Moostoss was. As I entered they cried out to me, "Strike him first or you will die." I struck him with the hatchet too, but he was already dead. Napaysoosee told me to strike him with the knife too.

We poured the tea over him because his body was full of ice in the house.

When I was called, to go to strike Moostoos, his wife said to me "kill him thoroughly, for he will come to life." When I went in the people there were Napaysoosee, Chuckachuck, Kunuksoos, Kunuksoos' wife Kiakichihowasoo, Little Felix's wife Mayaskwaysis, Eliza wife of Mihkooshtikwanis, Entominahoo and his wife, and Apishchikisaynis, with a blanket over his head.

They are lying when they say I struck the first blow. They are all related to one another, and I am alone among them. When I went in the man was dead, and no one was holding him. A blanket was over him, and some were holding on to the corners of the blanket. Kunuksoos' wife was one of them. I did not notice blood on the blanket over his head, but an axe was sticking in the body, and a knife was planted in his body. It was Napaysoosee's knife. Next day I saw an axe with blood on it, and recognized it was Eliza's by the handle. I saw her take it and hide it, I saw Napoysoosee cut off the head with an axe the next day. Next day there was a hole in the body where the axe had been sticking, and Napaysoosee told me to hold the stake over the hole and he struck it but it would not go down. Then Napaysoosee told me to hold on, and he took the stake made marks on it with charcoal, and used some medicine words which I did not understand, and when he struck it, it went right down through. Napaysoosee is a medicine man. Entominahoo and his wife, and Felix's wife were there too. The last thing was the cutting off of the head.

Napaysoosee, Chuckachuck, Entominahoo and Mihkooshtikwahnis were all medicine men, and they were conjuring, having small sticks planted in the ground beside him, and were conjuring and chanting for a long time inside, singing and drumming. Eliza was singing. Mihkooshtikwahnis failed to make medicine and they sent him out. The sticks were taken away next morning. Napaysoosee told me that when they were holding Moostoos down and trying to make him better by medicine, he threw Mihkooshtikwahnis to one side, and the other men sent him out saying his medicine was not strong enough. When Mihkooshtikwahnis came into the shack where I was, he told me that Moostoos's medicine was stronger than his, and added 'He's going to eat me now.'

When I struck, Chuckachuck said, "Take care you don't strike that axe," pointing to the axe which was sticking the body. Napaysoosee heard this.



Next day Napaysoosee drove a big file into the body, and also put a big stone into the body.

Entominahoo always had a willow stake to use in conjuring, and used it this time.

Entominahoo's wife and Napaysoosee told me that Moostoos had a lump of ice in his body which had caused his madness, and that they were afraid the ice was not melted, and he would come to life again. All the people were there, and we had been there all night watching to see if he would rise at sunrise. They would not let me go out. It was a little after midnight when he was killed. Napaysoosee forbade me to tell all this. Entominahoo's wife poured hot tea into him. Entominahoo saw everything that was done. It was quite light, there was a big fire, as it was very cold outside.

Napaysis was going to turn Wehtigoo first. All of the people were sitting close up to Moostoos.

The medicine men always help one another. It is a rule of their order.

KUNUKSOOS said:—Moostoos was my son-in-law. Theshack where he was killed was Entominahoo's. Moostoos was beginning to be queer when he came into that house about three days before he was killed, but was not sick in that time. I was living in a tepee. His wife and children did not move into that shack with him. Napaysis was dying and we were all in there watching him. I was there all that time taking care of Napaysis. Throughout the last day noticed Moostoos acting queerly. His eyes and face were not right. His eyes were moving fast and he was not the same at all. The night before he was killed, he said, "I am going to be wrong—I hate to destroy people." The summer before he said to me "I would hate to destroy my children, but I am thinking about it." The night he was killed, he said "If I am able, I will clear you all out to-night." At that time Napaysis was lying down and watching him. Moostoos was in another part of the house, lying down, and others around him. Don't know whether they were holding him or not. I did not look or see who were holding him or how. My back was to them, and I sometimes turned my eyes around, I saw a blow struck, Saw three blows struck with the axe. Before Payoo came in someone in the shack called, "He is going to overcome us." There was a blanket over Moostoos' head when he was struck, but I could see the outline of the head under the blanket. A minute or two elapsed between the first and the second blow, cannot say how long between the second and third. He did not move after the first blow was struck so far as I could see. He had been struggling hard and crying out before he was struck. Before the blows were struck, I saw Eliza beating him in the face with the cord. I am sure, from what I heard Moostoos say, that he was a Wehtigoo and was going to kill us all.

I understand a Wehtigoo to be a man possessed by an evil spirit, who kills everybody around him and eats them. Have heard that the people always kill a Wehtigoo.

I don't know what else we could have done to prevent Moostoos killing us. I believed we all had to die. Never heard Moostoos' wife say anything about it. She seemed to take the killing of her husband as a matter of course.

ENTOMINAHOO sworn, said:—I knew Moostoos, and I know Payoo and Napaysoosee. It was near Spring I last saw Moostoos. I saw him in a house. People present were Napaysoosee, Payoo, Napaysis, myself and wife Eliza, another woman, don't know name, Chuckachuck, Kunuksoos, not sure of wife. Nothing wrong with Moostoos. Was in my house one whole day. He died by getting a blow. Who gave it? Chuchachuck. Napaysoosee gave him a second blow. Payoo gave him a third blow after a little time not at once.

Chuckachuck killed him because he (Moostoos) wanted to kill the whole of us. They were holding him, Napaysoosee, Chuchachuck and a woman. Eliza was not holding him. I tried to hold him myself by the arm but he threw me to one side, If they did not hold him down they were frightened he would turn round and kill them. Moostoos had said to me "Uncle, if you don't cure me, I may kill you all and do something to my children" I tried my best to cure him. I used my medicine and had a little conjuring tent and had him in that. After we found we could not cure him, we got holding him because we feared he was going to kill us, if we did not master him. He said, "If I get up from here, I'll kill you all." He said before we held him down, "If you don't hold me down, I'll kill you all." He said that twice. It was only I that heard him say that before they got hold of him. He and I were alone, in the morning. I then tried to cure him with the medicine. It was late at night that we commenced to hold him down. Nothing wrong with him in the daytime lying asleep. *By his movements*, we took hold of him. He was going to jump up. Nothing was said about killing Moostoos.

Payoo gave the blow as soon as he came in. He was not moving very much when Payoo struck him. Payoo knew beforehand that Moostoos was going to do something. Can't say if I told him that. Some time between second and third blows. A few seconds between each of the strikes. Moostoos was moving when Napaysoosis struck him. He was moving when Chuckachuck struck him. Chuckachuck struck first. Napaysoosee second. Payoo third blow. The first blow killed him, but he was moving until after the third!

When Moostoos was being held down, we thought he was going to kill us all, because he said he was going to be a Wehtigoo. A man like that uses his spirit or his hands, anything he can lay hold of. We are all poor and had nothing strong enough to hold him. It was at night and we did not think of tying. When a Wehtigoo gets up he cannot be mastered. We thought it was no use trying to tie him. There were seven men, but three sick; two have since died. Moostoos said, "My uncle, if I get worse knock me on the head. I do not want to hurt my children."

I was sick at that time. Napaysis was sick and very weak. Apishchikisaynis, Mihkoostikwahniss was lying in his house sick. We thought Napaysis was going Wehtigoo. Kunuksoos was taking care of Napaysis all that evening and night. I wanted to help to hold him, but he threw me away, Moostoos was very strong. I don't know about Mithkoostikwahniss being holding him. Napaysoosee, Chuckachuck, and Kunuksoos were the only three men strong enough to be of any use to hold him. Napaysis was sitting, lying near the

door, I was sitting between the body and the door, the body lay parallel to the front of the hearth. I was in my conjuring tent, and when Moostoss began to try to get up I came out and went close to him. Moostoos and Napaysis were being treated. I do not know whether Payoo came in. A Wehtigoo is a man that goes crazy and kills and eats people. I saw a young girl Wehtigoo not long ago. She got better. I am old. The practice has been to kill Wehtigoos, but it is not every one that can kill a Wehtigoo. It took the strongest medicine men to kill a Wehtigoo.

ENTOMINAHOO'S WIFE, MARIE, said:— I am Entominahoo's wife. I saw Moostoos when he was killed. I was in the shack when he was killed. I thought Moostoos was a Wehtigoo. I was frightened. Thought the evil spirit got in'o him. He was a good man before that. Never saw a Wehtigoo before. It is only my own husband that knows anything about Wehtigoos. A Wehtigoo kills by bodily means. Can't say if anyone could be tied up. We were sitting up all night. I did not see him move all night. Next morning some one came to another house and told us that he was getting up. We sat up because we were frightened, because we were afraid he would come alive again. I did not pour hot tea but I saw it brought in for that purpose. I heard some one say bring hot water and they brought tea. They drank the tea. I did not see the sticks on the ground, but I saw it sticking in the body. Napaysoosee might have spilt the tea. I did not help Napaysoosee to tie the legs. I saw Napaysoosee cut off the head. I did not see anyone drive a file into the body. I don't know why the the head was cut off.

He was covered with blankets when the blows were struck, not the head, only a part of his body. I knew Moostoos from long ago. We were all on good terms together. We all liked him.

KUNUKSOOS, sworn, said:— I am a Cree. I was present when Moostoos was killed, I heard him say (the day before) that the evil spirit was coming on him. This was said in the same house, I do not know of him saying anything else. Entominahoo was there doing nothing. I saw Entominahoo trying to cure him. That was after he said above I did not look at what he was doing, he did not say he could cure him. I did not see anyone holding Moostoos. I could not say if he was a Wehtigoo. I don't know how a Wehtigoo feels. I do not know if Entominahoo could cure him. I did not hear anyone say he was a Wehtigoo. We had nothing to drink. We drank some ginger long before, about ten days. We drank tea. We were having a tea dance. We had a tea dance for a week.

We all liked Moostoos. He was my son-in-law. He was married to Chuckachuck's sister. The night before he was killed, I thought there was something wrong with him. In the day time by the look of his eyes. The eyes were not quiet—rolling. I never heard him before. I could see his face from where I was sitting. First, I saw his face covered and after it was not covered. I did not hear him breathing hard. I was frightened. I thought Moostoos would kill us, and had been frightened for two or three days. I saw Eliza using the medicine belt. I saw Felix's wife there. I did not see her do anything. Felix's wife was lost and could not be found, That is why she



was not brought down. I saw her last there. I know the policeman was looking for her. She came to Slave Lake and from there went away. Wehtigoo is a man-eater, who wishes to kill his friends. I heard Moostoos say he was afraid he would go that way, that was the winter before. I was there in the shack. I saw Mihkooshtikwahniss in there that day. I saw the conjuring tent with Entominahoo inside. I never saw them all play the drum and sing. I am not a medicine man. Only Entominahoo was a medicine man.

KUNUKSOO'S WIFE, ELIZA said:—Was in shack when Moostoos was killed. He was talking and said, "I will kill you all to-night". Did not hear anyone say anything. Did not notice Entominahoo was very much afraid. Heard him say before this happened that he would try to cure Moostoos. He did try and could not cure him. I thought Moostoos was a Wehtigoo. I never saw any Wehtigoos, but they used to be killed. We hear about Wehtigoos all over where there are Indians. We were all frightened when Entominahoo could not cure him, we were afraid of Moostoos, the way he was acting. I did not hear them say they would do anything to him. I was surprised when I heard the blow. I thought in my mind that if he could not be cured it was as well he should die. I heard no one say "Let us kill Moostoos". They all thought it was better to kill him. I thought they were going to kill him, I don't know if they could have mastered him. I do not know other minds. He was stronger, and the stronger on account of the evil spirit. I could not say if they could have held him if he had not the evil spirit. I do not think anything else was the matter with him. I don't know what happens to the evil spirit when the man is killed. Entominahoo was our head man. I did not hear him say what ought to be done. After Chuckachuck struck, Moostoos did not move. I was looking at him. After Napaysoosee struck him he did not move. After Payoo struck him he did not move. I do not know that everyone ought to kill a Wehtigoo.

MOOSTOOS' WIFE, JULIE said:—I was told something was going to happen. I was told my husband was going to kill us all. My husband told me before that "It is better that I should be killed than that anything should happen to my children" (that he should kill them). I did not speak to Payoo before he left the shack.

I don't remember what he told me but it was not the same day. I did not know that my husband would be killed. I heard next morning that he was killed. I don't know who told me. I felt as if I was asleep the whole time. I did not go to see the body. I never saw it. I was frightened when I heard that my husband was killed. Did not know that my husband was a Wehtigoo. He said before he was going to be one. I did not know that he would have to be killed, if he was a Wehtigoo. I heard he was a Wehtigoo at the same time I was told he was a Wehtigoo. I did not think it was wrong to kill him.

NAPAYSOOSEE, sworn, said:—I knew Moostoos a long time. We were great friends. Moostoos was in the shack a whole day and a half the night before he was killed. I was in the house all that night. I heard Moostoos talk about the evil spirit. He said the evil spirit

was in him and had the better of him. I was baptized. I was never at confession. I was always in the woods, seldom around amongst Christians. I was never taught Christian doctrine. During the last day and night Moostoos was looking different than before. He looked by his eyes as if he was going to kill us all. His eyes were flashing and rolling all day. He said, "I look on those children as young moose, I would like to eat them." He said a great deal but I could not tell what it was. When I came in, in the evening, he was lying down. There were two blankets over him. There were people sitting round. The conjuring tent was not up, but they put it up shortly. I think Kunuksoos and Apishchikisaynis put it up. They knew how to make it, they had made them often. It was made four or five feet from Moostoos. I saw his face then. There was no one holding him, but Eliza and Felix's wife were sitting beside him. Then his face looked worse than before. Entominahoo went into the conjuring teepee and tried to make medicine to cure Moostoos. Kunuksoos was beating the drum a little while. Eliza and Felix's wife were making medicine. I heard Eliza singing, but there was so much noise we could not understand the words. I mean the noise in the conjuring tent and the drum. Entominahoo was a long time in the tent and came out when he heard us calling out. We called out "We are all dead," when we saw that Moostoos was going to get up and master us. I was holding him. Chuckachuck, Eliza, and Felix's wife, I think Entominahoo was holding him after he came out of the tent. I was holding his wrist and gave it to Entominahoo, but he could not hold and was thrown to one side. Moostoos was making a noise and tried three times to get up, and stood up and jumped in the air. Everyone called out, "We are dead." At that time he said, "I will kill the whole of you this night." I heard him with my ears. We pulled him down, four of us, and got him on his back. I covered his face with a blanket. Then four of us, along with Entominahoo, held him. I held right arm. Chuckachuck left. Eliza left and Felix's wife right leg, all under the blanket. He was struggling hard. He tried to bite me twice but only caught the coat. He was very strong. We could not have held him much longer. He was throwing up his head and grinding his teeth. Eliza had a plaited worsted belt, a medicine belt. She had two other things in her hands, an axe and a pair of scissors. Eliza thrashed him with the medicine belt, standing at his left. Felix's wife had something in her hand, a bag and a piece of iron. She came round, and I am not sure what she did with it, but I thought she put it towards the breast. Eliza had the axe in her left hand when she was doing the whipping. Our faces were towards the ground as Eliza was whipping. I heard the sound of the beads on the blanket. I heard Eliza say something to Chuckachuck, it was, "Here my brother-in-law." Eliza handed Chuckachuck the axe. Eliza said no more. Chuckachuck gave Moostoos a blow on the left side of the forehead. The blanket was over his face. There was blood from the belt, and blood came from the cut. He never moved after that blow. I would have felt if he had moved. It was some time after that that I struck. Chuckachuck said, "You are a coward if you do not strike him, we will all be killed." Chuckachuck gave me a knife, someone gave me an axe. I think Entominahoo's wife gave me the axe, I gave a blow on the left

side and left the axe in the wound. I drove the knife into the bowels first and left it also in the wound. Payoo was in the other shack. He did not come in very soon. I could go about forty feet before Payoo came in. I heard a call before Payoo came in. It was, "We are all dead, come here and see." (I was one that called, Chuckachuck another). You have children, we will be killed, you are kind-hearted." As Payoo was giving the blow he said to the axe, "Don't jump back." He got the axe from somebody. I do not know who in the house. He did not bring it in. Payoo struck on the forehead. That was the last blow that was struck. We stayed there till daylight. It was my house. Apishchikisaynis and Kunuksoos and Napaysis went out. The rest stayed in. I don't know why they stayed there. We were sitting round the body. I thought he was dead. Chuckachuck told me we had better stay as he was afraid Moostoos would come to life again. I thought, and said in the morning he was coming to life. I thought I heard a noise in his body. Almost daylight something was done to the body. Payoo and I did something, and a woman, Entominahoo's wife, and I tied the legs. I don't know who told us. We tied the legs because we were afraid he would get up. Payoo and I struck that stick through the breast into the ground. We were afraid of him getting up, though he was dead already a long time. I think it was Entominahoo's wife told us. We stuck the stick in so that he could not get up. We believed he had an evil spirit in his body. We thought he had ice in his breast, therefore we poured tea into the body. We were going to melt the ice so we got the hot tea. We poured the tea in the same hole where the stick was driven in. I don't know who made the tea. It was brought in from outside. The man was dead while this was done. I was afraid he would rise again. I do not believe another man could rise, but that that man could. There was no person in that house in his right senses. I cut off the head. I was told to do it. That was the last thing that was done. Payoo was there, also, I think, Entominahoo and his wife, and Mihkooshtikwahniss, went out because he was frightened.

Cross-examined. Chuckachuck struck first. I was not aware of any movement from Moostoos. He was still breathing. Before I gave the blow he had stopped breathing. After I gave him the blow he was still breathing. When I gave the blow I struck through the blanket. I struck because my brother-in-law told me to. Entominahoo tried all his best to cure him, and because he could not cure him this happened. Entominahoo said he could do no more. All in the house were willing to kill him. They all heard what Moostoos said and they were all willing to kill him. Chuckachuck and I called out to the crowd, "We are going to die." We heard, "Try your best we will be all dead anyway." After that Eliza started to strike him with the belt. I thought then that he would have to be killed but did not say it. They were calling out when Payoo came in. If Moostoos had not had an evil spirit in him we could have held him down. I have heard of Wehtigoos twice before. Once saw the track of a Wehtigoo. When Indians know an Indian is a Wehtigoo they try to kill him.

PAYOO, sworn, said:—I was in the band when Moostoos was killed. I did not go in where Moostoos was till I gave a blow. I



could hear from outside what was going on inside. I could hear that there was a conjuring tent in the house and that they were making a noise. I heard the drum sometimes. I heard one singing, could not say who. It was not a woman. I went into that shack that night. I heard Napaysoosee calling, "Come and see him." I knew what was going on, they were making medicine for Moostoos. I was sitting with my brother-in-law and the women. I went into Entominahoo's shack. The two shacks were about thirty-five feet apart. When I went in I saw the man was dead. The body was all covered with blankets. He was lying alone, they had left him alone. I saw two axes and one knife. The knife stuck in the bowels, one axe stuck in the chest and the handle downwards. Chuckachuck and Napaysoosee were close to the body. Chuckachuck kneeling and Napaysoosee standing. Napaysoosee said to me, "He is going to rise from the dead when the sun gets so high, you will see." I was told by Chuckachuck and Napaysoosee to strike. I took an axe and struck. I thought on the body but it seems it was on the head. I felt afraid. I was thinking about my children. I was there till daylight. I heard about tying the feet. What I heard of Napaysoosee's story was correct. The first time I struck the stake it would not go in, and Napaysoosee made marks on it and made medicine and it went in right. I would not go near the house because I was afraid of Moostoos and the medicine work. I was not in the house before.

When I went in Moostoos was covered all but his feet. Napaysoosee was the only man who told me. When we were sitting in the other shack we heard the noise and the woman singing. I heard from the house what they were saying, I heard them saying that they were going to try and kill him with their medicines. I knew what they were going to die. Mihkooshtikwahniss told me Moostoos was going to be Wehtigoo. He said it would go hard with them if they could not do anything with Moostoos. It would be hard on them if they could not kill Moostoos. I did not go at once till I heard the noise calming down. I went because I was called over, as they were all frightened. They did not name me. I never looked under the blanket. I did not strike at once, nor till I was told to give the blow. I saw the man was dead. His arms were straight. There were two holding the blankets, the two women were sitting on one side.

First, he said, they were going to cure him, then they were going to try and drive the evil spirit out of him.

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Although the result of the trial is of no importance as far as the "study" is concerned, it may interest those who have read the foregoing condensed evidence to know that the jury after four hours' deliberation brought in a verdict of "not guilty" so far as Payoo was concerned, and "guilty" of manslaughter against Napaysoosee.

The Hon. Justice Rouleau quite agreed with the jury that notwithstanding the peculiar circumstances some punishment was necessary. Napaysoosee was therefore sentenced to imprisonment for two months.

## THE CARIBS OF GUIANA AND THE WEST INDIES.

REV. DR. W. R. HARRIS.

On the north end of the island of St. Vincent, West Indies, there is a level tract of country between the volcanic mountain La Soufriere and the sea, known as the Carib country. This district or reserve was allotted to the Indians after the rebellion of 1773 on condition of surrendering their arms and acknowledging the King of Great Britain as sovereign of the Island. Early in April, 1902, La Soufriere (4,048 ft.) awoke from its long sleep of ninety-two years and began to emit smoke. At 3 p.m., May 5th, a dense cloud of steam rose from the crater followed by tremendous detonations and a rain of ashes. The telegraph cables between Martinique and St. Vincent broke the same afternoon. The morning of May 5th the negro police, commanded by Captain Calder, escorted the Caribs, their wives, children and effects to Georgetown, and settled them on a deserted plantation outside of the zone of danger. Between twelve and one o'clock of May 7th, the roaring of the volcano was heard far out at sea, the lightnings were terrific. At the same hour the crater lake burst its cerements and the rivers Wallibou and Rabaca rushed towards the sea in raging floods of boiling water. This rush of boiling water cut off the escape of the fugitives from the windward side of the island, including the Carib settlement and caused the loss of two thousand three hundred lives. By the timely intervention of the government the Caribs were saved. On the afternoon of the 30th of October, 1902, accompanied by Captain Calder, I visited these Indians on their new reservation. The tribe numbered two hundred all told and were not unlike a group of Mississaugas I had seen at Wikwimikong, on Manitoulin Island. They were skilful fishermen, clever basket-makers and adepts in many curious arts. They retained their old language and their old manners, and except that they no longer went to war nor ate their prisoners, lived according to their old habits. By the census of 1891, we learn that there are on the island of Dominica three hundred and nine Caribs, and on Trinidad about one hundred and forty of the aboriginal tribe. Taking no account of those known as the black Carib—offspring of escaped slaves and Indians, the present population of the Caribs, of the West Indies, is from six to seven hundred, confined to the islands of St. Vincent, Dominica and Trinidad. When in Georgetown, British Guiana, I passed some days with Mr. Evans, the city librarian, who most courteously permitted me to consult all the books and manuscripts in the library, treating of the Caribs, from the discovery of Guiana to the present day. Historians and writers for the past four hundred years differ so much in their opinions of these aborigines that it is impossible to frame a true estimate of their character. Fernando Columbus, son of the great navigator, says in his diary: "These savages are almost negroes in color, they are bestial in their habits and go naked. In all respects they are very rude, eating human flesh and devouring their fish raw as they catch them. They are false, cruel, treacherous and revengeful; lacking humanity, victims of instinct and impulse. They have the kind of social instinct found in animals, but

are unable to ascend to a conception of a universal law which binds all nations in a common brotherhood." Again, Davies, the historian of Dominica, writes in 1666. "The island is inhabited by hordes of hostile savages, who dwell among horrid and unnatural scenery, infested by an infinite number of reptiles of dreadful bulk, monstrous serpents. Refugee slaves flee to them, (the savages) intermarry and beget black Caribs." Sir Walter Raleigh contended for the bravery and chivalry of the Caribs of the Orinoco, and Bryan Edwards in his History of the West Indies says, "the Caribs were found all over Guiana from the Orinoco to Brazil and in some of the West Indies. They were men of undoubted courage, and superior in intelligence to those of the interior." That races of Anthropophagi were known to exist before the time of Columbus is attested by many historians and travellers but they were not called *Cannibals* till after the discovery of the West Indies and the Orinoco river. Shakespeare was among the first of English writers to associate the word cannibal with man-eaters when in act iv. of Coriolanus, he makes one of his characters say: "And he had been canibally given he might have broiled and eaten him too." The name is of Spanish origin. Many of the early writers used *caribal* and *canabal* indifferently. It is, probably, from the latin *canis*, a dog.\*

Even in 1837, when William Hillhouse visited the tribes on the banks of the Cuyuni, he described the Caribs as "lazy, drunken and faithless; at the best, proud, filthy and unsteady. All Indians are gluttonous, but the Caribs will outeat all other tribes," writers such as Mack (1803), Schomburgk (1826), Clements and Van der Loth picture them as brave and fearless, cunning in strategy, and excelling in endurance. From my studies of the sources of information within my reach, I am of the opinion that he was as closely allied to our Iroquois in habits, customs, skill in attack, fierceness and endurance as it was possible for one savage tribe to resemble another, taking into account the variations of climate, forest life and the conditions of existence. In the beginning of the eighteenth century, Père Labat, a French missionary, paid a visit to the West Indies. He was an observant traveller and had passed some time with the Seminoles of Florida, and with the tribes along the Ohio and the banks of the Mississippi. Froude in his "English in the West Indies," pauses to speak eloquently of his scholarship and accuracy. When Labat visited Dominica, a tribe of original Caribs inhabited the island forests living their old life, and except that they were then professing Christians and no longer ate their captives, following their old habits. The père was an expert linguist and, before philology had become a science, was a student of languages. From the speech of the Caribs, he concluded that they were of the same race as the North American Indians. Their dialect bore a striking affinity to that of some of the nations he had visited in his travels. They called themselves "Banari" that is, come from over the sea. Unfortunately there are no records, monuments or ancient remains to testify to their past history. They may have hunted in these desolate forests before the Redemption, or they may have antedated the Noahic flood. Their customs and habits prove them to be indigenous.

\* Some derive it from *caro*, *carnis*, flesh.



but certain oriental remains of prehistoric days show that they are not autochthones. Hatchets of polished diorite or serpentine, arrow heads of argillite, chalcedony and obsidian found near Bayane, Demerara; relics discovered in caves near Cape Maise, and deposits of human remains called "caney's," indicate great age. Ask the young Indian of Guiana about his dead father, and he will tell you his father was famous for slaying cougars, serpents and caymans, and noted in the chase of the tapir, the wild boar and jaguar, but of his grandfather he remembers nothing. On the Cuyuni river and tributaries of the Berbice are mountain rocks whose river faces are carved with cabalistic characters and picture writings called "Timberi" by the learned societies of Demerara. No man has yet deciphered them, and, like the hieroglyphics on the Palenque tablets of Yucatan, they are the despair of the learned. By whom these rocks were cut, with what instruments, at what time, and for what purpose, no one knows, but they are all that exist to tell unto civilized man that other men of a strange race sailed these far inland rivers before him.

And now, let us attempt to trace the affinity of habits customs, manners and polity existing between these Indians of the Guianas—British and Dutch—and the tribes of our own country. At the present time, there are five nations or tribes in Guiana commonly known by the names of Warow, Arowak, Acowais, Macoushi and Carib. The five are practically one great family,—sprung from a common stock, but differing in dialect and local customs as the Huron and Iroquois were distinct from the Attiwandarons, though of the same root. Each of these tribes has its own great Council House or "Tabouy" where feasts are celebrated, affairs of state discussed, meetings held, and deputations received. They live in small villages consisting of twelve or fourteen carbets or palm cabins. These bourgs are always constructed near a river or small lake where the fishing is good and the land fertile. Each family clears for itself a plot of ground, and plants it with pepper, papaw, cassava, plantains, sweet potatoes and pine apples. They keep no cows, horses, goats, fowl or sheep. They are expert hunters and skilful in the use of the arrow, blow pipe and spear. Their canoes—woodckins they are called in Guiana,—are made like our own, and in the handling of the pagaye or paddle they have no superiors. Many of them have been converted to Christianity, but numerically they are still pagan. Association with the whites has debauched those near the plantations and towns, and sinking under impoverished resources they are gradually decreasing. In Georgetown, the capital of Demerara, there is a large covered market-place or bazaar where the Indians meet from time to time. They bring with them parrots, bows, arrows, monkeys, and birds of beautiful plumage which they sell to sailors and visitors. The proceeds of their sales are too often squandered in rum for which they have an unconquerable relish. Such is the condition of the Indians of Guiana to-day.

Let us now rapidly trace their life as it was in the old days. There is no record to prove that the Indians of lower Venezuela ever professed any religion, or practised any religious ceremony. "I believe if the truth were known," writes Charles Waterton, the ornithologist, who spent years in the forests of Guiana in the beginning

of the nineteenth century, "the Indian never offers up a single prayer or ejaculation to God". In another chapter of his "Wanderings in Guiana," he states they beseech Yambrabin, the god of evil, not to harm them, never addressing a petition to Wacinaci, the great spirit whom they believed to be too good and loving to do them harm. Every tribe, however small, was ministered to in disease and sickness by a Pay-i-man (Shaman). He was conjurer, soothsayer, physician, priest and clairvoyant. When anything was lost he was consulted, and when anyone was sick he rattled the calabash around them and besought the evil spirits to go away to their enemies. If a fever attacked the village, the Pay-i-man went through the village street, and around the cabins, howling, beating the sides of the shacks, and imploring, with dreadful imprecations, the evil spirits to depart. If the fever continued, proving his incantations too feeble for the visiting devils, they abandoned the site forever, and began a new settlement in another part of the forest. They never killed or injured the owl or goat-sucker—birds of omen or reverential dread. They were regarded as the living tabernacles of departed souls who, unable to rest in the spirit-world, returned with the permission of Yababion, the Demarara Indian devil, to haunt their enemies and avenge the wrongs done upon them in their days of nature. If a goat-sucker, a night bird, perched on an Indian's cabin and began its weird and plaintive dirge, misfortune or death was sure to follow and they awaited the event in terrible suspense. A day's march beyond the great falls and rapids of the Essequibo river, two immense rocks tower aloft upon the summit of a neighbouring hill. Their situation and their extraordinary shape strike the traveller with awe, and bear in upon him an impression of ancient grandeur he can never forget. From time immemorial these rocks were supposed to be the abode of an evil spirit who demanded and received from the passing Indian a tribute of tobacco smoke as a peace-offering.

The tribes were subject to few diseases apart from smallpox, diseases of the lungs, and peculiar throat troubles. The yaws was a common disease with which they were and are afflicted. The yaws manifests itself in large ulcers. When the ulcers assumed a yellow appearance, the patient was carried to the river and after his sores were washed he was rubbed with boiled lime juice mixed with charcoal.

Funeral ceremonies were not always the same among the nations. Among the Arowaks, after the dead body was washed and the head anointed with oil, the corpse was placed in a hammock and buried in a sitting position. The arms, pipe, and trappings of the dead man were buried with him so that he might enter the hunting-grounds of the spirit-world, and with bow, arrows, and blow-pipe fittingly set out upon his new life.

The Caribs, like the Neutrals, retained the dead in their cabins for a month, and when the odour of decomposition became insupportable, they buried the corpse with the oldest of the living wives. After a year the bones were taken from the grave, cleansed and placed in a basket which was hung from the rafters of their dwellings.

The war-chief was elected by the tribal warriors after undergoing a frightful ordeal. He had no voice in the great council which was

presided over by a national chief, who settled the internal and foreign action or policy of the tribe. Before the honor of election to the office of first warrior of the nation was conferred upon a brave he must, already, have given proofs of his fitness for the office. Of his endurance, bravery, and cunning, there could be no doubt. He was familiar with the haunts of wild animals, their migrations and habits. He was acquainted with the enemy's country, the springs of water and the forest trails. When notified of his selection for leadership he entered upon a preparatory fast of three days. After the completion of his fast he strode into the Council House accompanied by two companions who repeatedly spoke words of encouragement to him, and exhorted him to be brave. Accompanied by the councillors he walked to an adjoining field, and in the presence of the assembled spectators removed his *tourneau*, or loin cloth, placed his hands clasped upon his head and calmly awaited the torture. Two warriors now strode into the ring armed with *maquaries* or twisted whips of the *pita* wood. The flagellation that followed was frightful. The blood trickled down his naked body and ribbons of skin fell away from his bronzed back. He was then placed on a barbecot or wooden grate, under which a fire was started. If he fainted, he was lifted off and sprinkled with water. If he endured this torture unmoved and showed no fear, he was hailed as war chief of the nation amid the plaudits of the men and the caresses of the women. Before entering the war-trail the warriors tattooed their bodies with *racou* dye and perfumed them with the extract of the *hayawa*, or *acouri* plant.

The campaign was conducted on lines similar to those of the American Indian. All prisoners taken in war were either killed or held in slavery. Torturing by fire may have been practised but there is no record to prove it. It is probable that cannibalism obtained among all the tribes of Guiana, but the early Spanish adventurers having dealings only with the Caribs of the West Indies, Trinidad and the Orinoco, confined the practise to this nation. Human flesh was not their ordinary food. They *boucanned\** or smoke-dried the limbs of famous warriors whom they had slain in battle or took prisoners, and at special festivals handed them around to be gnawed, hoping, like the Iroquois to inherit some of their enemies' courage.

When a Guiana Indian wished to marry, everything was arranged for him by the parents, relatives, and intimate friends of the girl. The young man presented himself on an appointed day before the hut of his prospective father-in-law, when, after listening to an exhortation from one of the nearest relatives of the girl, and receiving the consent of her parents, the ceremony closed with singing, dancing, and drinking of a fermented liquor called *piwarri*, the bridegroom brought his wife to his own shack. Polygamy was a common practice, and the wives were garden and household drudges. When a woman gave birth to twins she killed and secretly buried or drowned one of the infants to avoid the suspicion of adultery. Strangely enough the tribes in the valley of the Orinoco circumcised their children on the eighth day. These were the Salivas, the Guamios and the Othomas. When and

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\*From Caribbean *boucan*, a place for smoking meat, hence our word buccaneer, one who consorted with the natives, and played pirate.



where did they acquire this Phœnician and Hebraic custom? ("Beschryving van Guiana," by I. I. Hartsuik, 1770).

Descent and succession among the Demerara tribes were in the female line, the same as among the Huron-Iroquois and many other primitive peoples in various parts of the world.

Morals, in the technical sense, they had none, but having no knowledge of the law they could not commit a breach of the law. They were "naked and not ashamed."

Among some of the tribes of lower Cayenne the "Couvade" obtained. When the warrior's wife was confined for the first time he betook himself to his hammock, which hung from the roof. His only food for three weeks was a small allowance of cassava and water. When his fast and lying-in were completed he left his hammock. His breast and back were then scarred with the teeth of the acouri and after receiving a few lashes from a pita whip he left his home for a few months and became a servant to some distant neighbor. Such was "La Couvade" which led the early Spanish legendists to report that in Cayenne the men, and not the women, were confined.\*

When Columbus visited the West Indies, the Caribs held possession of the islands of St. Vincent, Dominica, Trinidad and Martinique. Of the four tribes which soon after began to trade with the Spaniards and the Dutch, the Carib population was roughly estimated at 140,000, about a fourth of whom were settled between the rivers Corentyne—now the boundary between British and Dutch Guiana, and the Essequibo, dividing Venezuela and British Guiana. The tribal lands of the great body of the Caribs stretched through the delta of the Orinoco and the district to the north-west of the river known to this day as Caribiana. The estimate of Major John Scott, made in 1666, makes the population of British Guiana, as far as the Orinoco, to be 28,000 families of Caribs and 8,000 "fires" of Arowaks. Scott's census takes no account of the Acowais and Warows. All these nations traded with the British, Spanish and Dutch, exchanging tobacco, cotton and spices for trinkets and rum. Even as late as 1795, Captain Alexander, in his "Transatlantic Sketches," says that in the rebellion of that year eight hundred Carib warriors took the field. The Carib population of the West Indies and Guiana, at the present time, numbers from six to eight thousand; and the people live as their forefathers did by hunting and fishing. Anyone at all familiar with the history of the Huron-Iroquois nations will at once detect a striking similarity between them and the Indians of Guiana in many of their customs, habits and ceremonies. Particularly is this pronounced in their village life, their great Council House, their war chiefs and judicial chiefs, in the build of their canoes, in their belief

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\* The Korovans of Madras, Tylor, Vol. I, p. 76, "Primitive Culture," the Eskimo of Greenland, Egedis' "Greenland," p. 196; and the Coroados of Brazil, "Spix and Martin's Travels," Vol. II, p. 247, have similar customs. Giliz, de Tertire, Fermin, Biet and Brett refer to the custom in Guiana and other South American countries.

It is practised in Yunnan, China; by the Dyaks of Borneo; and in Europe we find it in Corsica, in the south of France and in the north of Spain.

Crawley also mentions the practice as existing among the Digger Indians of California; and "In Zarzandan, and amongst the Ainus, Miris, and Miaos, the Lagunero and Ahomama, the Caribs, and in Martinique, Surmam, Brazil, amongst the Jivaros, Mundurucus, Macusis, Arowaks and Arecunas, and in Wanga, Malabar and the Nicobars." "A study of Primitive Marriage," by E. Crawley, p. 419.

in good and evil spirits, descent in the female line, and the identity of ceremonies practised by both in exorcising evil spirits from the bodies of the deceased and the fever-stricken villages. Again, take their fear of the demon-haunted rocks and the propitiation of the evil genii with tobacco smoke, or look into their treatment of the dead, their belief in the spirit world, the sitting burial and the buried arrows, blow pipes, bows and outfit for the land of ghosts. Once again study the motive of the Carib and Iroquois in eating the flesh of a brave enemy, their rock inscriptions and the preparatory fast of the war chief. Unfortunately, I could not obtain any grammar or dictionary of the Carib language, and therefore am unable to verify by comparison Père Labat's statement, that the dialect of the Caribs was identical with that of some of the tribes he had visited in North America.\*

Their method of counting, too, is to us, somewhat peculiar. They have simple words for one, two, three and four, but for five the Arowaks say abar-dahk-abu "one hand and so on, up to nine but ten is biam-dahk-abu, meaning two hands." Above ten and up to twenty the name of the numerals refer to their toes (kooti). Thus eleven is expressed by abar-kooti-bana, and twelve biam-kooti-bana. When twenty is reached they say "one man", abar-loku.

Similarly, the Carib word for ten means "both hand fingers" and for twenty, "both hand fingers, and both feet toes."

Many primitive peoples count in this way, or in some such way, and our own word five is claimed by Humboldt to be connected with the Persian word *pendji*, a hand.

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\*The island Caribs have two distinct vocabularies, one used by men and by women when speaking to men, the other used by women when speaking to each other, and by men when repeating *oratio obliqua* some saying of the women. Their councils of war are held in a secret dialect or jargon, in which the women are never initiated. It has been suggested that this inconvenient custom, according to which a Carib needs to know, like Ennius, three languages, is due to exogamy, husband and wife retaining the languages of their original tribes respectively. This explanation, however, does not account for the marital dialect, and has been refuted by Mr. im Thurn on other grounds. *The Mystic Rose*, by E. Crawley, pp. 46-7.

## Robert Thomas Anderson.

“ROBERT T. ANDERSON, who lost his life by drowning at Go Home, Georgian Bay, on June 16th, 1903, was one of the most brilliant members of the class of '04, and his whole undergraduate career gave promise of a successful future. He was born at Elora, in 1878, but received his school training at Barrie and Aylmer. The foundation of his education was laid at home, and not until he was twelve years old did he enter the public school, at Barrie. In two years he was ready for the high school, and passed the entrance examination at the head of his class. In 1894 the family removed to Aylmer. Here he matriculated in 1899, and entered Victoria with the class of '03. Next year he was compelled to leave college, but he returned with the class of '04, of which he was a member at the time of his death.

From his earliest years he showed a great love for nature, and this deepened into the great passion of his life. “Bob’s” botanical and mineralogical collections, as well as those of insects, and birds, and their nests and eggs, were very large, and ranked among the best in the country. He was also a skilled taxidermist. *Acta Victoriana*, Oct. 1903.

It was in the Archæological field that Mr. Anderson was best known to us. His work along this line, he conducted quite as intelligently and as enthusiastically as if it had been his special subject of study, and what he did, he did thoroughly.

Much that many would be disposed to regard as trivialities, he refused to look at in this light, and the results he sometimes reached, showed the value of his patient investigations.

Since boyhood he evinced much interest in the archæological work of the Provincial Museum, and last year he presented to it a large number of excellent specimens.

Mr. Anderson was as modest as he was bright. He was perfectly free from any exhibition of that conceit which is so often offensive in young men of a scientific turn, yet he had the courage of his convictions, and maintained with firmness any position he thought was right.



# INDEX.

- Aboriginal capabilities, 69.  
     " Knowledge, 69.  
 Affinity of Carib tribes, 140.  
 Algonkin shore line, 104.  
 Ancaster township, 91.  
 Anderson, Robert T., 146.  
     " Stone pipe, 50.  
 Ansley, Elizabeth, 89.  
 Arendarronous, 106, 117.  
 Arrowheads of brass, 110.  
     " as knives, 60.  
 Arrow-straighteners, 79.  
 Artemesia township, 97.  
 Australian Black Fellow, 80.  
 Axes or celts known in Porto Rica, as thun-  
     der stones, 59 (note).  
 Axes or celts were not "skinning stones," 57,  
     58.  
 Ball, E., 87.  
 Balsam Lake, 106.  
 Bamboo combs, 80.  
 Banari, 140.  
 Band Michel's, 124.  
 Barbed fish-hooks, 84.  
 Bearss, Cyrenius, 74  
 Bear pipe, large stone, 100, 101.  
 Beeman, Dr. T. W., 72, 74.  
     " stone pipe, 50, 51.  
 Beauchamp, Rev. Dr., 80.  
     " " 81, 82, 84.  
     " " Bulletin on copper, 47.  
     " " illustrations of copper,  
         objects, 47.  
     " " recapitulation, 85.  
 Beverly township, 91.  
 Bexley, peculiar copper specimen from, 88.  
 Bexley township, 100.  
 Bine, Nottawasaga pipe, 48.  
 Birmingham Buddhas, 42.  
 Black Caribs, 139.  
 Black Fellow of Australia, 80.  
 Blackfoots and Iroquois, 125.  
 Blue Mountains, 97, 99.  
 Bone dice, 79.  
 Boucan and Buccaneers, 143.  
 Boyle, John R., 87, 125 (note).  
 Boyle, John E., 94.  
 Brass arrowheads, 110.  
 Brass Kettles, 106.  
 British Columbia coppers, 42.  
     " Indian, 80.  
     " mummies, 95.  
     " Indian coffin, 95 (note).  
     " totem posts, 80.  
 Brown, Dr. J. E., 90.  
 Burial in cairns, 96.  
     " in caves, B. C., 95.  
     " scaffold, 106.  
     " single, 106.  
 Cahiague, 103, 117.  
 Cairn burial, 96.  
 Callihoo, or Car-e-hoo, 124.  
 Carib basket-makers, 139.  
     " cannibals, 139, 143.  
     " method of counting, 145.  
     " tribes affinity, 141.  
 Caribal or Canabal, 140.  
 Caribs, 139, 145.  
 Cameron's Point, 120.  
 Caughnawaga Indians in North West, 124.  
 Cave burial in British Columbia, 95.  
 Celts or axes, hafted, from New Hebrides,  
     58.  
     " known in Europe as thuntler stones, 59.  
 Champlain, 123.  
 Champlain's route 117.  
 Characteristics of Indians, 69.  
 Chert better than copper for cutting, 40.  
 Chief's Island, 114.  
 Children's graves, two, 93.  
 Chipping of a pipe block, 49.  
 Claies, Lac aux, 124.  
 Clark, Gen. John S., 124.  
 Clayoquot, (Kyuquot?) 97.  
 Clay pipes in museum, 29.  
     " of European origin, 44.  
 Coates, John A., 97.  
 "Coppers" of British Columbia, 42.  
 Coins and crucifixes found in mounds, 45.  
 Colborne, Sir John 108.  
 Coldwater, 107.  
 Coldwater road, 119.  
 Coleman cemetery in Oro, 116.  
 Collingwood township, 97, 98, 99.  
 Comb making, 82.  
 Combs from New Hebrides, 79 (note).  
     " of bamboo, 79.  
     " European origin, 86.  
     " of shell, 79.  
     " from West Africa, 79 (note).  
 Couvade among many peoples, 144 (note).  
 Comox, Brit. Columbia, 94.  
 Copper and file marks, 42.  
     " and swages, 36.  
     " beads bent, not bored, 41.  
     " effect of cold hammering, 36.  
     " in sheets, 46.  
     " more ornamental than useful, 40.  
     " sockets and nail holes, 39.  
     " tempered, 36.  
     " welding a myth, 36.  
     " working, 46.  
     " American Anthropologist, 37, (and  
         note) 39 (note).  
     " axe from Odessa, Ont., 87.  
     " lip-flaring the result of hammering,  
         87.  
     " prevailing types of in Ontario, 88.  
     " specimens of unusual shape, two, 88.  
     " specimens wrapped in fur, 90.  
     " specimens not common, 88.  
 Cornet or trumpet pipes, 29.

- Couchiching, 102, 104, 106, 107, 110, 114, 121.  
 Craig, Dr. T. E., 70.  
 Crawley, E., 144 (note) 145, 146 (note).  
 Crucifixes, medals and coins found in mounds 45.  
 Curry, Rev. E. S. of the Ozack Mountains, 36.  
 Curved base mound pipe, 45.  
 Cushing, Frank Hamilton, 71.  
 Davey, H. S., 87.  
 Departed human souls in birds, 142.  
 Desiccated human bodies, 95.  
 Dick, Walter M., 91.  
 Dobie Mr. 88.  
 Douglass and Beauchamp collection, 44.  
 Drinkwater, Capt. John, 109.  
 Dryden, Geo. W., 113.  
 Dutch and French wampum, 86.  
 Ear drops and pendants, 61.  
 Eight Mile Point, 120.  
 Ekarenniondi, 97.  
 Elizabeth Ste., 106.  
 Eldon township, 100.  
 Embossing on copper, 37.  
 Ethnologically, the Indian a high type, 69.  
 Eskimo "couvade", 144 (note).  
 Euphrasia township, 97.  
 European influence, lack of on clay pipes, 30.  
 European-looking pipes, 29.  
 " objects in Indian graves, 52.  
 " copper tools, imitated Indian work, 41.  
 European pipes, imitated Indian pipes, 41.  
 " wampum, imitated Indian work, 41.  
 Examples of picking, 69.  
 Experiments with files, 68.  
 Evolution of large discoidal stones from hammers, 71.  
 Evolution of the pipe, 45.  
 Fenelon township, 100, 101.  
 Fictitiously valuable wampum, 86.  
 Figian bludgeons, 80.  
 File marks, 30, 44, 67, 68.  
 " on stone pipes, 44.  
 Finds near Orillia, 117.  
 Fingers as combs, 79.  
 Flints, Wolfe Island.  
 Flint find, Tidd's Island, 28.  
 Flared lips on pottery, 29.  
 " on clay vessels, 44 (note).  
 Fraser, F. W., 109.  
 Froude's English in West Indies, 140.  
 Gar-he-yo, 70, 124.  
 Geometric patterns in repoussé on copper, 47.  
 Gibbons, Jas., 124.  
 Glacial striae on stone implements, 71.  
 Glaspell, Oliver, 100.  
 Gouges in the Rideau Valley, 63.  
 Gorgets of stone, 65.  
 Gouges of stone, their use, 62, 63.  
 Gorgets or tablets in the Bahrein mounds, 77 (note).  
 Gorgets, use unknown, 76.  
 Grant, Dr. James, 100.  
 Grass River, 100.  
 Graves, recent, 93.  
 Graves on Walker farm, 92, 93.  
 Gray, Rev. Dr., 107.  
 Grooves on axes, 74.  
 Guiana funeral services, 142.  
 Gypsum bird pipe from Onondaga, 52.  
 Hafted axes from New Hebrides, 58.  
 Hammond, J. H., 109, 115, 118.  
 Hale, C. H., 102, 103, 119.  
 Hallen, Rev. Geo., 112.  
 Hartman unfinished slate pipe, 48.  
 Heyden, Lawrence, 117, 120.  
 Holes to repair stone, 40, 66, 67.  
 Holland township, 97.  
 How to tell true Thunder stone, 59 (note).  
 Hudson Bay Company, 42.  
 Human bodies dried, 95.  
 Human skeletons, 120, 121.  
 Hurdle Lake, 124.  
 Huron Iroquois and Caribs compared, 144-5.  
 Indian adaptiveness, 38, 70.  
 " advancement, 37, 38.  
 " agricultural products, 97.  
 Indians as imitators, 30, 81.  
 Indian as a mechanic, 94.  
 " caves, 97.  
 " characteristics, 69.  
 " copper working, 38.  
 " ethnologically, a high type, 69.  
 " ignorant of smelting, 36.  
 " inventiveness, 38.  
 " mechanical skill vindicated, 69.  
 " relics numerous, 108, 109, 111, 112.  
 " trails to Muskoka, 102.  
 Innisfil township, 90.  
 Iroquois and Blackfoots, 125.  
 " lost their language, 125.  
 " in Alberta, 124.  
 " Maya, Aztec and Peruvian civilizations, 33.  
 " 17th century sites, 85.  
 Isle Royale copper fish hook, 88.  
 Iron tomahawks, 110.  
 Jackknives and saws in comb making, 82.  
 James, C. C., 124.  
 Jefferson County, N. Y., 84, 85.  
 John Kumpanee, 42.  
 Jones, Rev. A. E., 97, 100.  
 Jones, W. H., 96.  
 Kettles, brass, 106.  
 " Kintosh" and "Boston," 94.  
 Kirkfield, 100.  
 Knives, women's, 59.  
 Korovans of Madras, 144 (note).  
 Kyuquot, 96.  
 Labat, Père, 140.  
 Lac aux Claires, 124.  
 Laidlaw, Geo. E., 100, 106.  
 Large bone awls or needles, use of, 77.  
 Large, Dr. R. W., 86.  
 La Soufriere, 139.  
 Laying out lines, 76.  
 Loango, West Africa combs, 79 (note).  
 Loft, F. O., 124.  
 Loodon township, copper axe from, 88.  
 Longest stemmed stone pipe, our, 53.  
 Matchedash Bay, 107.  
 Manchester Calicoes, 42.

- Martinique, 139, 141.  
 Maori (New Zealand), 80.  
 McCallum pipe, 48.  
 McGuire, Joseph D., pipes, 31, (note) 32, 43.  
     On Copper, 36.  
 McKellar Township, Parry Sound, 88.  
 McLean, Rev. Dr., 88.  
 McPhie, J. W., 113.  
 Mayor, Harry, 90.  
 Medonte Township, 104, 106.  
 Medals and coins found in mound, 45.  
 Metal ornaments, 121.  
 Moore, Clarence B., on copper, 36.  
 Monitor pipe, 45.  
 Mound builders as copper workers, 36.  
 Mound pipes, collected by Squire and Davis, 45.  
 Michikaning (Orillia), 123.  
 Michel's Band, 124.  
 Midland, peculiar copper specimens from, 88.  
 Milne, T. F., 112.  
 Mortuary customs, variety of, 95.  
 Mummies from British Columbia, 95.  
 Muskoka, 102.  
 Nail-holes (so-called) for thongs, 40.  
 Narrows, The, 108, 121.  
 Newberry, T. H., 100.  
 Newcombe, Dr. C. F., 95.  
 New Hebrides Combs, 79 (note).  
 Nottawasaga township, 97.  
 North Orillia, 102.  
 Notching, style of, 73, 74.  
 Oldest graves, 28, and note.  
 Old fishing station, 122.  
 Old stakes at the narrows, 123.  
 Onondaga brass pipe, 90.  
 Onondaga County, N. Y., combs, 84.  
 Onondaga Township, Ontario, 91.  
 Origin of combs, 79.  
 Orinoco, 140, 144.  
 Orillia town, 102, 107, 108, 116, 119, 121.  
 Orillia, North and South, 104 to 124.  
 Orillia *Packet*, 102 (note), 120, 123.  
 Oro township, 104.  
 Osborne, A. C., 123.  
 Osprey township, 97.  
 Ossuaries, 109, 112.  
 Ossossane, 98.  
 Otis, H. B., 87.  
 Owl and goat-sucker, abodes of departed human souls, 142.  
 Pascoe, H., 77.  
 Payaman or shaman, 142.  
 Pecking examples, 69.  
 Pendants and ear-drops, 61.  
 Peterson, Dr. C. A., 36 (and note).  
 Phalangeal bones, 78, 79.  
 Pictographs in Demarara, 140.  
 Pipe decoration derived from pottery, 34.  
     " forms, curved, origin of, 27.  
     " forms, straight, 27.  
     " making, European influence in, 28.  
     " ornamentation, 106.  
     " scheme of evolution, 34.  
     " evolution from the cigar, 31.  
     " in graves, 33.  
     " trumpet-mouthed, 29.  
     Pipe of stone, 30.  
     " in graves, 28.  
     " European-looking, 29, 54.  
     " clay. Were they originally always straight? 29.  
     Pitting of hammer stones, 70.  
     Plan lines, or guide lines on stone pipes, 50, 51, 52.  
     Plum-stone game, 79.  
     Potter's art, an old one, 30.  
     Pottery with flared lips, 29.  
     " making the first Indian art to fall into disuse, 30.  
     Pottery, shape and ornamentation, 29.  
     " unknown in British Columbia, 35.  
     Prevalence of superstition, 69.  
     Pump drill unknown to Indian, 45.  
     Purple wampum, 86.  
     Rama reserve, 114.  
     " township, 102.  
     Raleigh, Sir Walter, 139.  
     Recent Indian graves, 93.  
     Refuse heaps (middens), 111.  
     Relics found in Demarara, 140.  
     Repoussé copper work, 47.  
     Robinson, Chas. I., 102.  
     Rogers, Amos, 102.  
     Rough chipping, 73, 74.  
     Rowe, Basil R., 113.  
     Ryerson, Jesse, 113.  
     Saw cuts in working stone, 49.  
     Scaffold burial, 106.  
     Scheme of pipe evolution, 34.  
     Seminole, 140.  
     Severn River, 102, 104, 106.  
     Shells bored, 40.  
     Shell combs, 79.  
     Sheet copper, 37, 46, 47.  
     Ship's doctor, 93.  
     Single burials, 106, 107.  
     Silver Creek, 104, 106.  
     Single graves, 109.  
     Skulls bored, 91.  
     Skinners, or skinning stones, a misnomer, 58.  
     Skeleton and tomahawk, 108.  
     Small stone pipe from Dalhousie Lake, 55.  
     Smoking, ceremonial significance, 28.  
     Smooth rubbing, 74.  
     Soapstone lizard pipe, 52.  
     Socket, evolution of, 39.  
     Standing rock, 98, 100.  
     St. Mathias (Ind. village), 97, 98, 99.  
     Stone owl pipe, from North Bruce, 55.  
         axes, or celts, variation in size and weight, 58.  
         pestle, very well made, 94.  
         mould for copper tools, 36.  
         pipes bored by tubular drills, 45.  
         pipes, some by whites, 30.  
         gorgets, 65.  
         pipes, 30.  
     St. Jean (Ind. village), 97.  
     St. Vincent Island, 139, 144.  
     Squire and Davis' Ohio mound pipes, 45.  
     Stræ not from a file, 77.  
     Superstition prevalent, 69.  
     Style of notching, 73, 74.



- Tablets in Great Britain, 77 (note).  
 Tablets or gorgets in Bahrein Mounds, 77 (note).  
 Tache, Dr., 113.  
 Tempered copper a myth, 36.  
 Thunder stones in Europe, 59.  
 Timberi, or rock painting, 141.  
 Trails to Muskoka, 107.  
 Trial of Payoo and Napaysoosee, 126 and following.  
 Trinidad, 144.  
 Truman, S., 100.  
 Trumpet mouth pipes, 44.  
 Tidd's Island flints, (note), 28.  
 Tubes of stone, drilled, 40.  
 Tylor, E. B. 144 (note).  
 Tying holes an ancient device, 41.  
 Unfinished bone comb, 82, 83.  
 Use of stone gouges, 62, 63.  
     large bone needles or awls, 77.  
 Utica shale for tools, 71.  
 Variation in size and weight of stone axes, 58.  
 Vega, Garcillas de la, 43.  
 Village sites, N. and S. Orillia, 104.  
     "      in Victoria county, 100.  
 Walker Farm, Onondaga, 91.  
 Wampum, purple, 86.  
 Washago, 102, 107.  
 Waterton, Charles, 141.  
 Waugh, F. W., 91.  
 Wehtigoo, or Wendigo, 126.  
 Welding of copper, 36.  
 Wendigo, or Wehtigoo, 126.  
 Were clay pipes at first straight? 29.  
 West African, 80.  
 What is the "white stone"? 53.  
 White, Aubrey, 124.  
 Wikwimikong, 139.  
 Wilson, Sir Daniel, on crinal types, 114.  
 Wolfe Island flints, 28.  
 Women's knives usually made of slate, 59.  
 Yababion, Demerara Indian devil, 142.  
 Yambrabin, the god of evil, 142.

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1904

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Appendix to the  
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Ontario

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# CONTENTS.

	Page.
Presentation .....	5
Additions to the Museum .....	4
Notes on some Specimens .....	17
Hammer or Pestle .....	17
Rubbing Stones .....	17
Woman's Knife (unfinished) .....	19
Stone File .....	19
Tooth Tools .....	20
Stone Axes .....	22
Chisels, or Club Spikes .....	24
Stone Gouges .....	24
Stone Pipes... ..	27
Clay Pipes .....	31
Bone Articles .....	32
Bone Arrow .....	35
Bone Combs .....	35
Are the Perforated Bone Needles Prehistoric? W. J. Wintenberg .....	39
Pendants of Stone .....	42
Turtle (Tortoise) Shell Pendant .....	44
Shell Objects .....	45
Wampum Strings .....	46
Bird Amulet .....	49
Copper .....	50
Pottery .....	50
Picture Writing.....	54
Porcupine Quill Work .....	57
Husk False Faces .....	58
Winona Stone .....	59
Mexican Marble Mask .....	61
Oneida Mounds .....	62
House of the Devil .....	62
Old Dam on the Grand River .....	64
Anthropology at the World's Fair, St. Louis .....	69
An Example of Primitive Persistence .....	71
The Ojibwas of Lakes Huron and Simcoe. J. Hugh Hammond .....	71
Cabiague .....	74
The Coming of the Ojlbwas .....	76
North and South Orillia .....	77
Lake St. George .....	87
Cahokia, or Monk's Mound .....	88
Rupert's Land in the Olden Time. By James Stewart .....	89
Mortuary Customs in British Columbia. Rev. R. W. Large, M.D., C.M....	100
A Museum or a Musée? .....	101
Indian Graves in New York State .....	103
The Eskimo of a Hundred and Fifty Years Ago. John Potts. By courtesy of Miss Muriel Merrill .....	104
The Marquis de Nadaillac. Biographical Notes, etc. ....	113
Correction .....	117

At no period of man's life were wars the normal state of existence. Prince Krapotkin (contemporary Russian scientist).

Certain impulses develop in childhood which disappear entirely in later life. H. R. Marshall (American psychologist).

Crime is a phenomenon of atavism, C. Lombroso, (Italian criminologist).

Crime is psychic atavism. P. Mantegazza (Italian anthropologist and physiologist).

During the primitive period rites are the immediate and direct expression of the religious sentiment, and translate the genius of each people. T. Ribot.

Even among savages some leisure from the cares of life is essential for the culture of art. A. C. Haddon (English anthropologist).

Excess of imagination in the child, as with primitive peoples, is clearly connected with less clearness of perceptions, which are transformed, at will, one into another. T. Ribot.

Every man is some months older than he bethinks him. Sir T. Browne.

For the animal, for the child, for the savage and the uncivilized man, form and physical strength are all; for the civilized man mental strength and moral strength tend to become the object of greatest value. Colajanni (Italian sociologist).

In primitive poetry man is in the foreground, nature is only an accessory. T. Ribot.

In primitive society the drama is the school of religion. J. W. Powell.

In the natural world everything has a meaning. L. F. Ward.

Like primitive peoples and savages, children lose an immense amount of time in contests and debates. B. Machado.

Man living, flesh and bone, is the last object the savage came to deify. G. Tarde. Dr. A. F. Chamberlain in *Journal of Folk Lore*, Boston, July-Sept., 1904, pp. 161-170.

## ARCHÆOLOGICAL REPORT, 1904.

HON. R. A. PYNE, M.D., LL.D.  
Minister of Education.

SIR,—The accompanying report is not as comprehensive as it was intended to be, owing not only to the large and increasing amount of time demanded for museum and office work, but because of the numerous interruptions that have inevitably occurred since its preparation was begun.

Next year, under similar conditions, it will be almost impossible to issue anything but a very brief report, because of the large number of re-arrangements that have become imperative if the collection is to maintain its position, and changes of this kind require a great deal of time. Every year, for the last five or six years, re-arrangement has been postponed with the hope that additional case-room would be supplied; failing this, however, it will now be necessary to stow away a considerable quantity of the material at present on exhibition, to make room for the improved re-installation which will demand an increase in the number of labels, as well as an amplification of their contents.

Correspondence and other office duties during 1904 exceeded greatly those of any previous year, and, consequently, not much time could be given to field-work. A few visits were made to some interesting portions of the Province, and fuller reference to these will be found in what follows.

During the year we were presented by Mrs. J. W. Scatcherd, a Canadian lady now residing in Flagstaff, Arizona, with a number of excellent specimens from the Pueblo country.

I have arranged with the curators of several other British colonial museums with a view to making ethnological as well as archæological exchanges, and these will be effected just as soon as it is possible to find time for selection, listing, and packing.

You will, I am sure, be pleased to know that the interest in what is prehistoric, relating to our own country, manifestly grows. Not only is this evidenced by the number of visitors to the museum, but by the demand for copies of the archæological reports both in Canada and other countries.



I may be permitted to repeat that as no provision has yet been made for workshop accommodation, the quantity of material now in the museum, and in need of repair, is rapidly accumulating.

The time and attention demanded by the largely increased number of specimens are such as to require additional assistance. There is now enough work to employ a general assistant, and to keep an expert maker of labels busy continuously.

Without these, the museum may be maintained in the old way, but as a factor in our educational system, it must prove to be of little or no value.

I have the honor to be,

Yours respectfully,

DAVID BOYLE.

---

## ADDITIONS TO THE MUSEUM.

26,754.—Large stone, bear pipe, six and three-quarter inches in height, slightly imperfect, very well carved, although not highly finished, work evidently not quite completed. This is the largest effigy pipe yet found in Ontario. It was picked up by Mr. T. W. Newberry, lot 6, con. 20, Tiny township, Simcoe county, in 1902, and was procured for the Provincial Museum by Lieut. G. E. Laidlaw.

26,755.—Unfinished knife blade. The tang is forged and the outline of the knife has been formed in a somewhat unmechanical way by means of a sharp cold chisel, and all the cutting has been done on one side. Length six and five-eighth inches, including the tang, which is two inches, breadth of blade an inch and a quarter, thickness of blade 2 mm. Found on banks of Grass River, Victoria Road, Victoria County, presented by Dr. J. Grant, per Lieut. G. E. Laidlaw.

26,756.—Copper arrowhead with socket; three inches long, socket one inch and a quarter long; blade flat on both sides. Found by Lieut. G. E. Laidlaw, on village site number 20, block E, Bexley township.

26,757.—Pocket-knife blade, steel, ruins of Fort Ste. Marie, North Simcoe, stamped MATHIEV. SAMVEL. I. A. PIERRE. LATIN. David Boyle, Toronto.

26,758.—Long clay pipe stem, Bexley township, George E. Laidlaw.

26,759.—Bone needle, worn very smooth by usage, four inches long, Eglinton, York township, David Boyle, Toronto.

26,760.—Bone head, four and one-eighth inches long. Eglinton, York township, David Boyle, Toronto.

26,761.—Bone, tally-bead, three and three-quarter inches long, Eglinton, York township, David Boyle, Toronto.

26,762-3.—Scraper (chert) Eglinton, York township, David Boyle.

26,764.—Bar amulet, (cast) Carmel township, Eaton county, Mich., C. V. Fuller Grand Ledge, Mich., U.S.A.

26,765.—Turtle-like figure, two and seven-eighth inches long and one and a half inches wide of dark (almost black) stone, and comparatively thin (thickest part not more than three-eighths of an inch. From end to end along the middle, on the upper side, and fully half way along from the head on the under side (terminating in the middle in a loop) is an inset of silver one-sixteenth of an inch wide. There is a diagonal break across the neck, but the head is kept in place by means of the metallic bar. Given to Hon. W. Robinson in 1848, by an Ojibwa, at Bruce Mines, Ont. Alfred Willson, C.E., Toronto.

26,766.—Abortive arrow-head of chert, of very pure quality, lot 4, L.R.W., Bosanquet. Alfred Willson, C.E., Toronto.

26,767.—Large, grooved stone axe, imperfect, lot 5, con. 1, R. W. Ellis, (Mount Pleasant village) Brantford township, Brant county, per John Jefferson, Paris, Ont.

26,768-89.—Twenty-one flaked chert implements of various shapes, J. E. Moody, Appleby, lot 1, concession 3, Nelson township, Halton county.

26,790.—Large shell (*Busycon perversum*) from grave in Tecumseth township, Simcoe county. David Boyle.

26,791.—Large shell (*Busycon perversum*) partly worked; from ossuary at Lake Medad, Flamboro township, Wentworth county. David Boyle.

26,792.—Roughly made and undecorated, shallow, red bowl. New Mexico.

26,793.—Small and roughly made bowl or cup, with a necked and flat base, plain, Santa Clara. Arizona.

26,794.—Small red cup, with necked and flat base. Decorated very rudely, with straight black lines arranged angularly. Arizona.

26,795.—Small red cup with necked and flat base. Decorated with roughly drawn lines in black, arranged in curves. Arizona.

26,796.—Small red cup, with necked and flat base. Decorated with black lines, and trefoils in black. Arizona.

26,797.—Small red cup, round bottom. Roughly decorated with black lines. Arizona.

26,798.—Small red cup, round bottom, very roughly decorated with black lines. Arizona.

26,799.—Small red cup, with flared lip and round bottom. Roughly decorated with black lines. Arizona.

26,800.—Small, red olla, round bottom, decoration in black lines, arranged triangularly. Arizona.

26,801.—Small red olla, flattened bottom. Lozenge decorations in black lines. Arizona.

26,802.—Small red olla, flattened bottom. Decorative lines, black, in perpendicular zigzags.

26,803.—Small red cup (somewhat egg-cup like) with slightly incurved lip. Decorated with spirally arranged black lines. Arizona.

26,804.—Small red olla, round bottom. Heavy, black triangular decorations. Arizona.

26,805.—Small red pitcher with handle and lip—round bottom.—Decorations in black lines. Arizona.

26,806.—V-shaped red tube with black lines. Arizona.

26,807.—Small red cup (wine-glass like) arrow-like decorations in black inside and outside. Arizona.

26,808.—Rudely made (micaceous clay) vessel with bale-handle surmounted by bird like form. Arizona.

26,809.—Small, long necked, olla, in light coloured clay. Flat bottom. Yuma Indian, Arizona.

26,810-1.—Large red ollas, decorated roughly with black lines. These are sixteen inches in height, and twelve inches in diameter at the widest part. Arizona.

26,812.—Large red pitcher twelve inches high, handle and lip. Heavy, triangular decorations in black. Arizona.

26,813.—Small white vessel with bale handle. Decorated with black lines, very rudely made. Pueblo.

26,814.—Small, white, saucer-like vessel. Unclosed encircling lines inside. Central design, floral, seven-armed. Pueblo.

26,815.—Clay bottle. Arizona.

26,816.—Clay bottle. Arizona.

26,817.—Clay plate. Arizona.



- 26,818.—Clay bottle. Arizona.
- 26,819.—Large black spoon or ladle-like clay object. Santa Clara, Arizona.
- 26,820.—Small black pitcher. Santa Clara, Arizona.
- 26,821.—Clay cup, six-sided at the base and round a lip. Arizona.
- 26,822.—Clay cup, six-sided at base and round at lip. Arizona.
- 26,823.—Small white plate (broken). Arizona.
- 26,824.—Small white spoon-like object in clay. Pueblo. Arizona.
- 26,825-31.—Flint and chert arrowheads, Southern Indiana, David Boyle.
- 26,832-3.—Drills, Lawrenceburg, Southern Indiana, U. S. A. David Boyle.
- 26,834-39.—Small axes or chisels, Guelph and Eramosa township. David Boyle.
- 26,840.—Pipe head of fine limestone, Hastings, River Trent, Asphodel township. David Boyle, Toronto.
- 26,841.—Stone pipe, carved human form, on bowl, head of figure broken off, Nassagaweya township, Halton county, Ontario. David Boyle.
- 26,842.—A portion of what seems to have been intended for the stem of a stone pipe, two of the quadrangular sides are roughly pecked, the other two have been rubbed fairly smooth, on three sides are shallow depressions clearly made with the point of a stone drill, Elora, Ont. David Boyle, Toronto.
- 26,843.—Small pendant or amulet of Hudson River sandstone; a rudely carved human face on one side, the other being marked irregularly with incised lines near Fergus, Nichol township, Wellington county, Ont. David Boyle, Toronto.
- 26,844.—Paleolith, Bois de Rocher, St. Helens, Cotes du Nord France., David Boyle, Toronto.
- 26,845-6.—Paleoliths, Thames Valley, Oxfordshire, England. David Boyle, Toronto.
- 26,847-61.—Flint flakes, Northstoke, England, collected by T. H. Powell, England. David Boyle, Toronto.
- 26,862.—Large black chert spearhead, Leeds township, Leeds county, (near Gananogue). David Boyle, Toronto.
- 26,863-7.—Flint flaked arrowheads, Bignor Hill, Sussex, T. H. Powell, London, England. David Boyle, Toronto.
- 26,868.—Stone gouge (quadrangular in cross section) found by Mr. T. Jordan, near Seaforth, Ont. Presented by A. Cosens, B.A.
- 26,869.—Small and unsymmetrically formed vessel, (Moqui) ornamented in brown, red and white. Mrs. J. Webster Wallace, Flagstaff, Arizona.
- 26,870.—Small water filter, sharply constricted in the middle. The upper half is ornamented with two lizards in black. Mrs. J. W. Wallace, Flagstaff, Arizona, U.S.A.
- (This specimen was found in the Walnut Canon, nine miles southeast of Flagstaff in the country of the Cliff Dwellers).
- 26,871.—Olla, with simple, but peculiar double hook-like markings, arranged in pairs, horizontally and perpendicularly, alternately. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,872.—Small olla, (Moqui) simple flower design. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,873.—Moderate sized and peculiarly ornamented olla; the pattern which is in four parts contains in each division a very highly conventionalized bird form, facing an erect plant. Mrs. J. W. Scatcherd, Flagstaff, Arizona. See figure 79.

26,874.—Moderate sized olla (Moqui) with somewhat unusual pattern in dark browns. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,875.—Small olla with sharply constricted neck, and somewhat rudely ornamented, (Moqui). Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,876.—Rattle used in the Moqui Snake Dance, Arizona. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,877.—Miniature Navajo loom, small, with portion of woven cloth, the material said to be native wool (Rocky Mountain sheep) and the colors of native dyes, red, yellow, orange and black. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,878.—Small piece of discoidal sand stone with roughly formed handle on one side, perhaps used as a pestle or upper stone with a metate. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,879.—Hand stone for using with metate; this specimen is thin and ovate, and made from a hard volcanic tufa. Mrs. J. W. Scatcherd.

26,880.—Large and very good specimen of metate of hard tuffaceous material. It is twenty inches in length, eleven in breadth, and the cavity is worn three and a half inches deep. Arizona, Mrs. J. W. Scatcherd, Flagstaff, Arizona, U.S.A.

26,881.—Ladle or dipper made of horn from mountain sheep, Cliff Dwellings, Walnut Canon, nine miles southeast of Flagstaff, Arizona. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,882.—Bone awl or needle, four inches long, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,883.—Metacarpal bone of deer (three marks on front side) probably used in gambling, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,884.—Bone bead, seven-eighths of an inch long, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,885.—Cast of very finely proportioned slate gorget, oval, found in Huron township, Wayne county, Mich., by Daniel Girard in 1902. Charles V. Fuller, Grand Ledge, Mich., U.S.A.

26,886-903.—Flints (well made) lots 10 and 11, concession 1, Brantford township. John Jefferson, Paris, Ont.

26,904.—Large arrow-head, or small spear-head of black flint, barbed and well made, lot 10, con. 1, Brantford township. John Jefferson, Paris, Ont.

26,905.—Large, very well made, and almost perfect, banner or butterfly stone, Stouffville, Markham township, York county. C. Ainsworth.

26,906.—Long (15 inches) stone chisel, sharpened at both ends. It is roughly quadrangular in cross section, for the greater part of its length, and looks like a splinter upon which little work has been done beyond some smoothing, except at each end. Stouffville, Markham township, York county. C. Ainsworth.

26,907.—Stone tool, five inches long, roughly pointed at each end. Stouffville, Markham township, York county.

26,908.—Stone adze, very well made, almost perfect, seven inches long. Stouffville, Markham township, York county.

26,909.—Stone gouge, somewhat imperfect, hollowed from end to end. Not common in this part of the province. Stouffville, Markham township.

26,910.—Long and comparatively narrow stone axe or chisel, polished only in part. Stouffville, Markham township.

26,911.—Small stone chisel, pointed at each end, one point or cutting part being made edgewise, and the other sidewise. Stouffville, Markham township.

26,912-19.—Celts or axes in various conditions and of various sizes. Stouffville, Markham township.

26,920.—Old clay pipe of European pattern, probably French, found by Mr. John E. Riggall between floor of upper and ceiling of lower rooms, in the old Ashbridge house, Queen street east, Toronto. Mr. John E. Riggall.

26,921.—Old European clay pipe, probably French. Stem nearly eight inches long. Found near Fort Rouille (Old Toronto) David Boyle, Toronto.

26,922.—Large flint scraper, lot 18, con. 9, Blenheim township, Oxford county. Mr. L. Hunter, per W. J. Wintemberg, Washington, Ont.

26,923.—Pair of native moccasins made by late Hy-joong-kwas, Chief Medicine man of the Onondagas, worn by him when procured in 1898. David Boyle.

26,924.—Inlaid and relieve metal and bamboo, Japanese tobacco pipe. David Boyle.

26,925.—Photograph of Flathead, Cree, Blackfoot and Nez Perce collection in possession of G. W. Gill, Pincher Creek, Alberta. Mr. G. W. Gill.

26,926-7.—Two strike-a-lights found with Indian remains in Whitchurch township, York county, Ontario. David Boyle.

26,928.—Strips of paper mulberry bark, same as used in the making of tapa cloth in South Pacific Islands. David Boyle, Toronto.

26,929-32.—Scrapers, Thames Valley, England. David Boyle, Toronto.

26,933.—Plain and well finished small stone axe, lot 17, con. 3, East Oxford, Ont. Wm. P. Hart, Esq., Woodstock.

26,934.—Grooved stone axe, unusually narrow at cutting edge. Lot 17, con. 3, East Oxford, Ont. Wm. P. Hart, Woodstock, Ont.

26,935.—Obsidian core, imperfect; latterly used as a tool. Brit. Guiana. Very Rev. Dean Harris, D.D.

26,936.—Obsidian, leaf shaped implement, Brit. Guiana? Very Rev. Dean Harris.

26,937-8.—Obsidian arrowheads, Brit. Guiana? Very Rev. Dean Harris.

26,939.—Stone disc, perforated in the centre, perhaps used for gambling. Two and a half inches in diameter, and half an inch in thickness. Lot 10, con. 3, Orillia township, Simcoe county, Ont. Frank Day, Orillia, Ont.



26,940.—Clay pipe, representing a blunt-nosed dog or wolf, lot 10, con. 3, Orillia township, Simcoe county, Ont. Frank Day, Orillia, Ont.

26,941.—Small brass candlestick; may have belonged to some pioneer Catholic missionary's portable altar, lot 10, con. 14, Orillia township, Simcoe county, Ont. Mrs. R. Anderson.

26,942.—Clay pipe head, stem broken, lot 10, con. 14, Oro township, Simcoe county, Ont. Mrs. R. Anderson, Orillia, Ont.

26,943.—Clay pipe, slightly imperfect, lot 2, con. 5, Orillia township, Simcoe county, Ont. Wilbert Greer, Orillia, Ont.

26,944.—Clay pipe, eagle-like head, with unusually well moulded wings and tail, lot 2, con. 5, Simcoe county. Wilbert Greer, Orillia.

26,945.—Clay pipe, rudely representing a bird, lot 2, con. 5, Orillia township, Simcoe county, Ont. Wilbert Greer, Orillia.

26,946.—Stone pipe, vasiform, peculiar in what appears to be two stem holes, one small, and one large, almost opposite to each other, lot 2, con. 5, Orillia township, Simcoe county. Wilbert Greer, Orillia, Ont.

26,947.—Stone axe, six and a half inches long, two inches wide, unusually thin, with well ground semi-circular edge, abruptly sharpened and mostly on one side. This axe is apparently the result of modifying a naturally worn stone, lot 2, con. 14, Oro, Ont. J. Stewart Nelson, Orillia.

26,948-51.—Four discoidal brass bangles made from the metal of an old kettle. Surface finds. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,952.—Stone disc, inch and a half in diameter, half an inch thick. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,953.—Stone disc, inch and a half in diameter, three-eighths of an inch thick, well made, partly bored on each side. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,954.—Stone disc, one inch in diameter, not well rounded, hole partly bored on each side, half an inch thick. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,955.—Stone disc, inch and a quarter in diameter, thickness variable, partly bored on one side. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia, Ont.

26,956.—Small piece of red slate irregular in form, perforated, an inch in diameter. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,957.—Unfinished stone pipe-head, quadrangular, boring begun in cross section, deeply notched on back and top front edges. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,958.—Very small and roughly made clay pipe, bowl wide in proportion to height. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,959.—Small and rudely made clay pipe, stem broken, apparently the work of a child. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,960.—Antler end, four inches long, hollow, bored transversely near middle as suggestive of an Eskimo toggle. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,961.—Well formed representation of a bird's head, hawk, or eagle, from a clay pipe. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,962.—Rude representation of a man's head from a clay pipe. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,963.—Roughly worked piece of steatite, inch and a quarter in diameter, three-quarters of an inch thick, irregularly formed hole with small hole to meet it through the side, probably a section of a disused or broken pipe. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia.

26,964.—Bone spear or arrowhead, neck broken, no barbs, well made, four and a half inches long, three-quarter inches wide near neck. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,965.—Bone arrowhead, two inches long, inch and a quarter from point to point of barbs, well made, no neck. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,966.—Eleven cylindrical white glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey Orillia, Ont.

26,967.—Four cylindrical blue glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia.

26,968.—Eighteen blue glass beads of various forms. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,969.—Fourteen variegated small Venetian glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,970.—Six brown stone beads of native make from five-eighths of an inch to two inches long. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,971.—Thirteen small discoidal and cylindrical brown stone beads, native make. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,972.—One red coral, and one amber-colored glass bead. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,973.—Seventy-nine discoidal shell beads (wampum) of native and European make. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee.

26,974.—Three glass beads. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia, Ont.

26,975-8.—Four clay pipes, west quarter, lot 2, con. 5, North Orillia. Archibald Fyfe, Orillia, Ont.

26,979-80.—Two clay beads, globular, about one inch in diameter. These specimens taken from an ossuary are the only two

of the kind, so far as known, that have been found in this country.  
Lot 2, con. 4, North Orillia, Ont. Archibald Fyfe, Orillia.

26,981.—Gouge-axe (Huronian slate) lot 2, con. 14, Oro township. J. Stewart Nelson, Orillia, Ont.

26,982.—Roughly chipped piece of Huronian slate, perhaps intended for a gorget, lot 2, con. 14, Oro township. J. Stewart Nelson.

26,983-4.—Stone axes, very well made, lot 2, con. 14, Oro. J. Stewart Nelson.

26,985.—Large and well polished stone axe, lot 1, con. 6, North Orillia. John R. Harvey, Orillia, Ont.

26,986.—Stone adze of diorite, five and three-quarter inches long, having what is usually the plainly rounded side, relieved by four shallow flutings, lengthwise, Grimsby, Lincoln county, Ont. Dr. Millward, Grimsby, Ont.

26,987.—Carved head (human) and date, 1776 on piece of lithographic limestone, found by Charles Cooper in the fall of 1899 on the property of Mr. E. D. Smith, near Winona, about a mile east of the McNeilly Mountain road. The boy was digging to get out a rabbit, and found the stone about a foot below the surface. It was purchased from him by Mr. Edgar E. Farewell, of Grimsby, who presented it to the museum.

26,988.—Birch bark box,  $9\frac{1}{2} \times 6 \times 3$  inches, ornamented with undyed porcupine quills. The work on the lid is said to be an imitation of some painting on a rock which, a few years ago, fell into Lake Couchiching. According to Mesaquab, (Jonathan Yorke, the Rama Indian who made the box), the picture represents two Ojibwas, and a Mohawk, the latter being clubbed by one of the former.

26,990.—Skull of Hindoo, Oojain, Central India. Dr. T. W. Beeman.

26,990.—Skull of Indian, Dalhousie Lake, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,991.—Skull of monkey. Dr. T. W. Beeman, Perth.

26,992.—Large, grooved, hammer stone, North-west Territory, or Lake Superior district. Dr. T. W. Beeman, Perth, Ont.

26,993.—Large, grooved, hammer stone, North-west Territory, or Lake Superior district. Dr. T. W. Beeman, Perth, Ont.

26,994.—Double-pointed stone tool, much weathered, seven and a half inches long. Peter Dowdall, lot—, con. 4, Drummond township, Lanark county, Ont. Dr. T. W. Beeman, Perth, Ont.

26,995.—Large and roughly made celt of Huronian slate, Elmsley township, (Rideau Lake shore) Lanark county. Dr. T. W. Beeman.

26,996.—Small and imperfect celt, Elmsley township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,997.—Cylindrical soap stone pipe, with small projection for stem attachment, slightly incised with lines parallel to edge, and others running diagonally. Probably of recent make. Drummond township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,998.—North-west stone pipe, with flaring bowl. Dr. T. W. Beeman, Perth, Ont.

26,999.—Slate gorget or pendant, with one unusually large hole



which shows signs of much wear, Camden township, Addington county. Dr. T. W. Beeman.

27,000.—Slate (Huronian) gorget, one hole, showing no sign of wear. This specimen is beautifully veined, Camden township, Addington county. Dr. T. W. Beeman.

27,001.—Small, huronian-slate bird-amulet. Lot —, con. 8, Drummond township, Lanark county. This the most easterly point from which any specimen of this kind has been reported. Dr. T. W. Beeman, Perth, Ont.

27,002.—Large and well formed egg-like piece of soapstone. Probably of recent make, Rideau Lake shore, Elmsley township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

27,003.—Brass bracelet, brought from North-west after the Riel Rebellion, and said to have been the property of Big Bear. Dr. T. W. Beeman, Perth, Ont.

27,004. Boer pipe (native make). From near Belmont, Orange Free State, Africa. Dr. T. W. Beeman.

27,005-6.—Two imperfect pieces of ancient Mexican pottery, both affording evidence of manufacturing methods. Dr. T. W. Beeman.

27,007.—Indian skull, lot 2, old market block, town of Orillia. The body was buried about two feet six inches deep, and the skeleton is said to have measured six feet four inches long. The body lay with the head to the west, and having the hands crossed in front. J. Hugh Hammond, Orillia, Ont.

27,008.—Twelve strings of cylindrical wampum, European make, presented by F. Lamorandiere, of Cape Croker, Ojibwa Reserve, per H. G. Tucker, Barrister, Owen Sound, Ont. Two of the strings consist wholly of white beads, the others of purple and white, arranged four and five of the former from two to three of the latter. Mrs. Lamorandiere formerly Mrs. Benoit, received these from her mother, Mrs. Gonneville, to whom they were given by Mrs. Piché, an Objibwa woman of Saugeen or Sauging. The beads were regarded by the family as entitling the holder to a portion of land, in what is now the County of Bruce. The strings are twelve inches long, but were probably much longer at one time. See description elsewhere.

27,009.—Imperfect tablet or gorget (two holes) from Tuscarora Reserve. Jacob Hess, Six Nations P.O., Ontario.

27,010.—Small and well made stone adze. Tuscarora Reserve. Jacob Hess, Six Nations, Ont.

27,011-15.—Five Iroquois dance masks, collected by Jacob Hess from members of the band on the Tuscarora Reserve.

27,016-8.—Three skulls from grave in town of Orillia on property of Mr. Willey. Mr. Willey, Orillia.

27,019.—Bone whistle, (?) lot 11, first range, South Hamilton and London Road, Brant county, Ontario. Walter M. Dick, Brantford, Ont.

27,020.—One cast of bird-amulet found in Manvers township, Durham county, Ont. J. G. O. D'Olier, Rochester, N.Y.

27,021-2.—Two casts of pipes, found in Manvers township, Durham county, Ontario. J. G. O. D'Olier, Rochester, N.Y.

27,023.—Cast of Catlinite disc pipe, found 13 miles north-west of Lansing, Mich. E. R. Grinald, Grand Ledge, Mich.

### WILSON COLLECTION, HISTORICAL SECTION.

The following have been presented to the Historical section of the museum by Mrs. George H. Wilson, of Toronto. They were in the family of her late husband, a well-known citizen, who was for many years connected with the Bank of Montreal in this city.

Gold plated military gorget.	Old safe.
Wooden snuff box.	Six chairs.
Alpine horn.	One bake kettle.
Four school medals.	Two Montreal pennies.
Watch fob ribbon.	Two Montreal coppers.
Masonic certificate.	Eye glass (gold rimmed.)
Masonic apron.	Military belt buckle.
Pair of ear rings, coral, plain.	Ten embroideries.
Man's tie pin with turquoise.	One pair satin slippers.
Bead bracelet with gold clasp.	One family bible.
Small cameo, female figure, unmounted.	Two walking sticks.
Brass medal holder.	Three fencing foils.
Piece of corded silk for necktie.	One fencing mask.
Bead purse.	One single-stick.
White clouded agate brooch.	One pair guards.
Small agate brooch, without pin.	One bow and arrow.
Quadrangular polished agate, unmounted.	Two dress swords.
Gold seal, "G. W."	One chief's gun.
Pair of epaulets (officer's).	One musket.
Ramsay's songs, one volume.	One constable's baton.
Snuff box, portrait, round.	One cocked hat.
Snuff box, black, oval.	Two handkerchiefs.
Snuff box, plain, round.	One shako.
Two pairs shoe buckles, black.	Two military coats.
One pair bracelets, black.	One photo, Mr. and Mrs. Wilson.
Two odd bracelets.	Picture, Miss Grace Wilson.
Eye glass and silver chain.	Picture, Bailie Andrew Wilson.
Old steel bangle purse.	Officers, Bank of Montreal, 1877.
Five rings and small pin in box.	Mr. Wilson, horseback, water color.
Pewter snuff box.	Chamois leather vest.
Ivory match safe.	Picture, La Vivandiere.
Six souvenirs of St. Bernard, Switz.	Steel engraving, card players.
Lances, in case.	Steel engraving, woman by waterside.
Three old shirt studs.	Officers, Bank of Montreal, 1885.
Ambrotype and photograph in case.	Picture, St. Andrew's church, Toronto.
Three Billing's medals.	Lyceum Theatre hand bill.
One Billing's diploma.	Paste board hat box.
Tortoise shell spectacles and case.	One lime coated horse shoe.
One small religious book.	Two pairs of pistol cases.
Powder horn.	Two samplers.

#### *Loaned.*

Silver snuff box.	Four silver-plated candlesticks.
Pewter snuff box, Mr. G. Wilson.	One gravy spoon.
Four brass candlesticks.	One habitant sash.

## NOTES ON SOME SPECIMENS.

## HAMMER OR PESTLE.

The tool figured here (figure 1, 5,222), seemed to have served the double purpose of pestle and hammer. The upper end bears testimony to the latter use, while the lower end has been rubbed down to an even surface as if intended for use in grinding.

While admirably suited for either purpose, this stone is not as symmetrical all round as it appears to be from the side pictured, but, as with some other specimens referred to in this report, the stone was no doubt chosen because of its naturally handy form. It was found in the Rideau Valley, and was presented by Dr. T. W. Beeman.

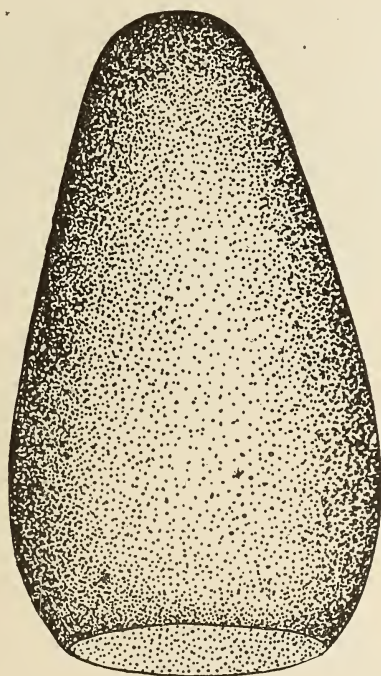


Fig. 1. (5222) full size.

## RUBBING STONES.

It is seldom that one meets with a rubbing-stone which so clearly tells its own story as the one represented by figure 2, (6,294) does. The piece is of Hudson River sandstone, as is apparent from its color and cleavage, and from its bearing on the under side an impression of *Avicula demissa*, a characteristic fossil of the formation in question. Plain, smoothing stones of this material, are not uncommon, but of fluted, or deeply-grooved like this one, specimens are very rare in Ontario.

Besides the five grooves as shown in the engraving on one side, there is a shallow one on the under side, in addition to three short cuts made by a sharp tool.



No doubt this stone was chosen on account of its abrasive quality, but it is somewhat puzzling to know what objects were polished by rubbing them in such grooves, especially the curved ones.

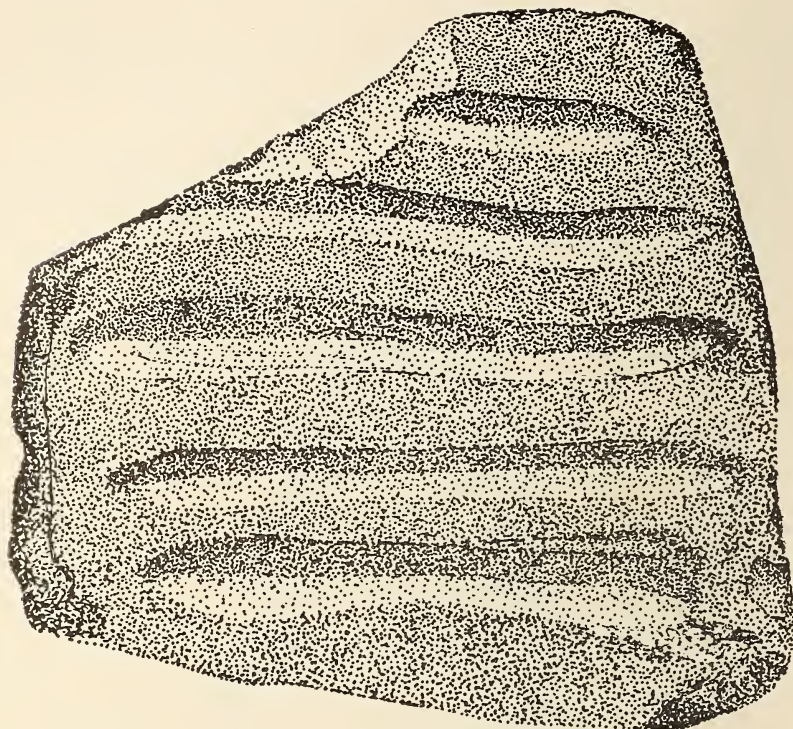


Fig. 2. (6,294) full size.

This interesting "file" was found in Brantford township, by Mr. F. W. Waugh, and forms part of the Waugh collection in the Provincial Museum.

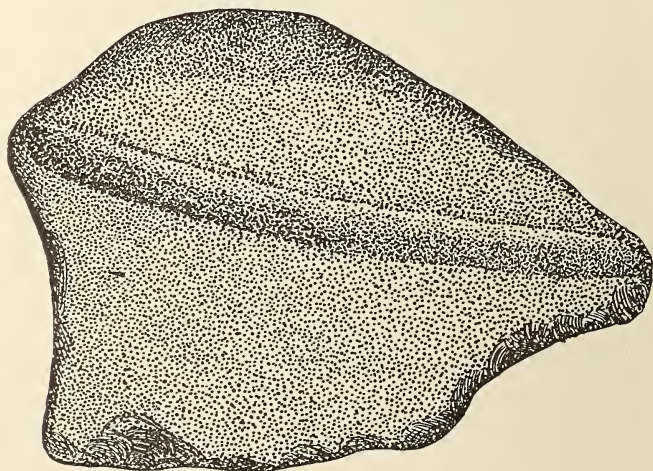


Fig. 3. (23,968) about  $\frac{1}{2}$  dia.

Another and a much larger specimen of this kind is figured here (figure 3, 23,968) from lot 17, concession 12, Blenheim township. It is of coarse, gritty limestone, and has on its surface only one groove eight inches and a quarter long, from five-eighths to three-fourths of an inch wide, and from three-eighths to three-fourths of an inch deep. The ungrooved portion of the stone has also been used for rubbing purposes.

This specimen is part of the W. J. Wintemberg collection.

#### WOMAN'S KNIFE, (UNFINISHED).

The appearance of the woman's knife—broad and thin—would lead one to suppose that in every case the article had been produced

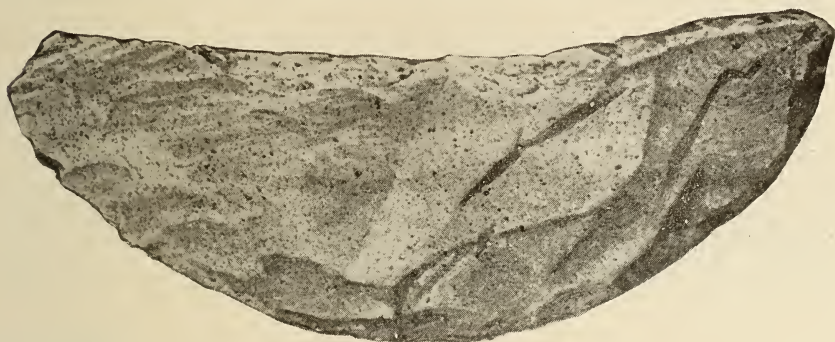


Fig. 4. (1,590) full size.

from a piece of easily split schist or slate. No doubt material of this kind was chosen when procurable, but Huronian slate, which seems to have been the preferred kind of stone for this and a few other purposes, does not lend itself readily to the splitting process, and the thinness to which such implements have been reduced is, probably, to a large extent, the result of rubbing down. Unfinished, or only partly made specimens of this kind are comparatively rare, but the few that have been found indicate the necessity of much grinding or rubbing to bring them into shape.

Figure 4, (1,590) was found by Mr. Robert Martin on his farm lot 27, con. 6, Scarboro township.

Until a somewhat recent date, tools of this kind were in use among the Eskimo.

#### STONE FILE.



Fig. 5. (5,920) full size.



Figure 5, (5,920) illustrates a nondescript sort of tool, or appliance of fine bluish schist. Perhaps the word *file* would describe this if we may be guided by the appearance of the more irregular edge the surface of which is scratched in such a way as to suggest either rubbing, or being rubbed on. The broader end looks as if it had once been sharpened, so that perhaps we here have a degraded celt, the "grit" of which suggested the secondary use. The angle of the worn edge indicates that the tool was probably held in the left hand, the thumb pressed against the side shown in the cut, while the object to be smoothed or polished was worked against it in the right hand.

The tool here figured was found on the Aaron Main farm, lot 8, concession 5, Beverly township, Wentworth county.

### TOOTH TOOLS.

In the absence of metal, man is compelled to make use of many devices to supply his wants, and this is perhaps more apparent where tools are concerned, than in connection with any other phase of savage life. In America, even his employment of native copper served him but poorly, for notwithstanding the silly, popular belief about his ability to temper this metal in order to produce a good cutting edge, we know that he was driven to use not only stone, but bone, and horn (antlers) when he required effective tools.

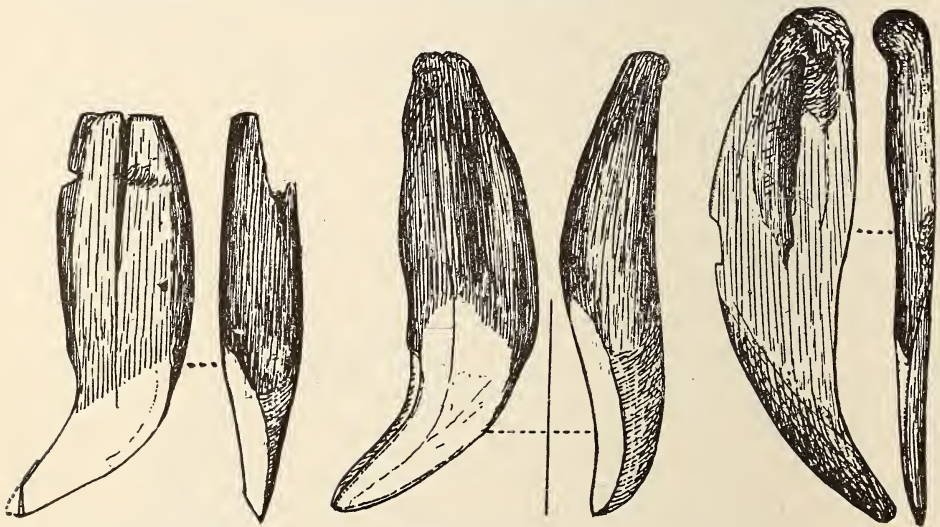


Fig. 6. full size.

Fig. 7. full size.

Fig. 8. full size.

Everyone who has examined even very small archæological collections must have observed this, but teeth, too, were utilized for several purposes, although to a more limited extent.

The largest teeth available for such uses were those of the bear, and the beaver. The canines of the former were ground or rubbed down in two ways—one, reducing the naturally exposed end of the tooth to about half its original thickness, thus forming on the convex edge an angle that would have proved serviceable as a scraper either in dressing skins, or in rounding and smoothing arrow-shafts.



Tried on wood, both hard and soft, it does very good work. Figures 6 and 7 from the Laidlaw collection (Balsam Lake district) illustrates this method of shaping.

Another way of forming a much sharper cutting edge was to rub down the tooth considerably beyond the middle of its thickness as shown by figure 8, which also seems to have been at first split and afterwards ground down until not more than a quarter of an inch thick at the thickest part. A simple cutting-tool of this kind might be dignified with the name of "knife," and, as such, it was probably used.

In Europe, as well as in America, early man made use of the beaver's incisor teeth as tools, although in the former continent, in a way, of which, so far as I am aware, no example is positively known on this continent. Our old-world ancestors, taking their clue no doubt from the animal's propensities for gnawing, fitted the teeth to handles as shown by figure 9, from a specimen in the British Museum.\*



Fig. 9.

The tool, of which this is a picture, was probably used as a chisel.

Notwithstanding the immense number of beavers that must have fallen into the hands of Canadian Indians, few traces of the animal are found on old camp or village sites, anywhere in the Province. This may be owing to a custom requiring all the remains of these animals to be burnt, and thus prevent them from becoming the prey of dogs, a contingency which, on becoming known to the beavers, would render other captures very difficult, if not impossible!

Although as has just been mentioned no example has been found in this country, corresponding to figure 9, it may be that this is owing to the decay of the handle and its wrappings, while the teeth themselves would scarcely show anything to indicate artificial use.

But we know that the Indian used beaver teeth in another way, and most of the evidence comes to us from finds made by Lieut. George E. Laidlaw in the course of his thorough examinations of



Fig. 10. full size.



Fig. 11. full size.

ground in the townships surrounding Balsam Lake. The specimens from the neighborhood in question are frequently found split, or

\*With the consent of the publisher from an engraving, in *Castorologia, or the History and Traditions of the Canadian Beaver*. By Horace T. Martin, F. Z. S., etc., Montreal, Wm. Drysdale and Co., 1892.

ground down to less than half their original thickness, and highly polished on the inner, or fractured sides, so as to make the concave edges quite sharp. Similarly, the convex edges, as shown in the engravings, are brought into good shape for scraping. The smaller diagrams above figures 10 and 11 show how the teeth look in cross-section. We are quite in the dark respecting the way in which specimens of this kind were used, and as everything connected with our national totemic animal should be interesting, it would be very gratifying if we could find out how beaver-tooth tools were employed.

Archæologically we are not likely to meet anything but teeth to remind us of the immensely important part played by the beaver in time prehistoric, and, perhaps even less, to call up historic reminiscences, but it can do no harm to remind our young folk that during a great part of the eighteenth century, as well as for nearly all the first third of the nineteenth, goods of every kind were valued by the traders, according to the beaver-skin standard. In 1733, at Moose River, a single skin was equivalent to half a pound of white beads, or three-fourths of a pound of colored beads, or two pounds of sugar, or two yards of gartering, or twenty fish-hooks, or twelve needles, or a pair of shoes, or four spoons, while as many as from ten to twelve skins were required to pay for a gun, four for a gallon of brandy, six for a blanket, and one and a half for a handkerchief. When the fur trade was at its best, as many as 300,000 beavers were killed annually.

For much valuable information about the beaver, readers are referred to the book already mentioned.

#### STONE AXES.

Strong as is the similarity among stone axes or celts from all parts of the world, yet there are peculiarities that characterise such tools within given areas. He would be but an indifferent student of archæology who would have any hesitation in pronouncing diagram 12, (22,621) as that of a tool not belonging to Ontario, no matter where it might have been found. It is sometimes urged by even intelligent museum visitors that they cannot see the use of so many things of the same kind in a collection. It is quite true that in a general way there is a strong similarity among native made tools, but not nearly so much as there is among those of European origin, and it is not seldom that just because of a slight variation in one of the former, we may find a clue to something hitherto dubious. In addition to this, we have the well-known fact that the "larger the number of instances, the safer it is to generalize." Notwithstanding, then, that in celts there is a sameness—the wedgelike form—there are also differences that enable us to distinguish those that have been made by peoples occupying widely separated areas.

In Ontario, grooved specimens are rare when compared with those not so marked, and when the groove does exist we know at a glance the latitude to which the tool belongs. In this and similar ways it is possible to recognize what may be called an imported specimen.

The axe here figured is one of these. It came to us from Mrs. Scatcherd, Arizona, and is here illustrated to show the great differences between axes from that quarter, and those from this province.



About two years ago a correspondent wrote from Wisconsin asking whether we had ever found any fluted axes in Ontario. The answer was, "no." It was inferred from the note of enquiry that celts having longitudinal grooves on one side were not uncommon in that State; until this year, however, nothing of the kind had appeared here, as far as known.

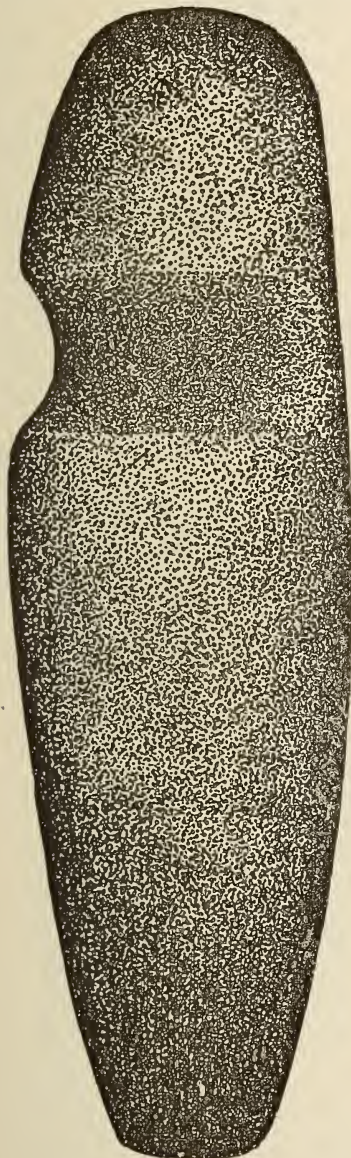


Fig. 12. (22,621)  $\frac{3}{4}$  diameter.

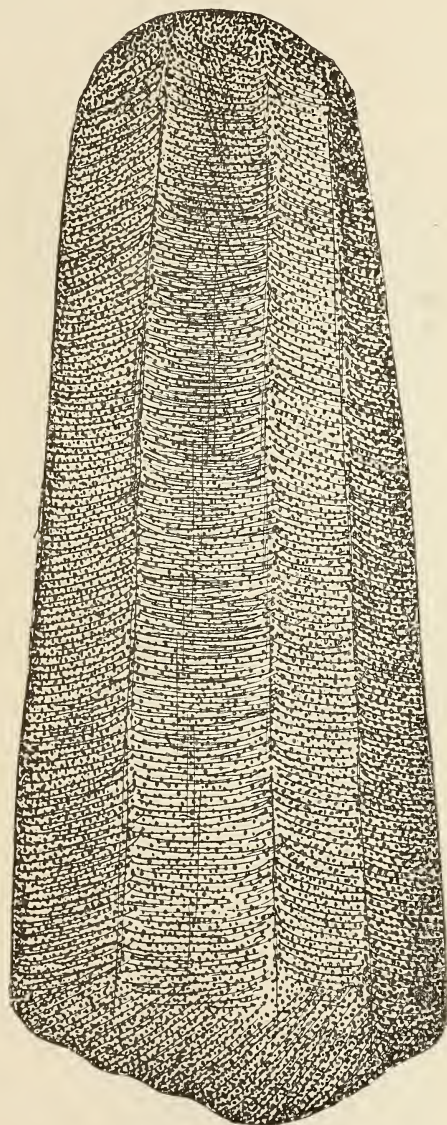


Fig. 13. (26,986) full size.

When on the search last summer for the "American Gentleman's" cave, elsewhere referred to, a specimen of the kind in question was found in the private collection of Dr. Millward, of Grimsby, Lincoln county, who very kindly presented it to the Museum. This wholly novel type of tool was found near Grimsby. It is five and three-fourth inches long, and fully an inch in thickness near the

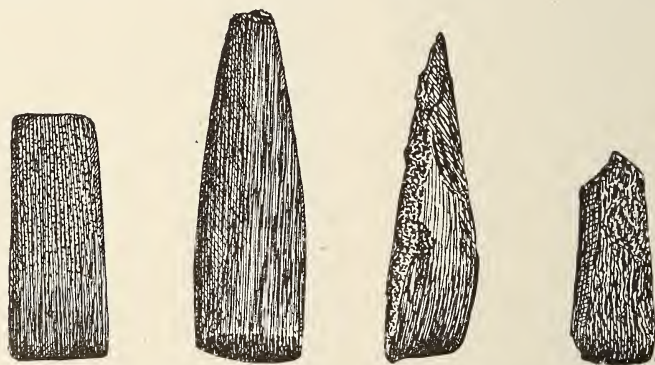


middle, figure 13, (26,986). It is an adze rather than an axe, and it is on the rounded side the fluting occurs. On the diagram it will be seen that there are four of the so-called flutings on the Grimsby tool, but they are not so sharply ridged as the diagram would indicate. The two middle grooves are most markedly concave, while the one to the right is scarcely at all so. The two edges also are slightly hollowed from end to end. In other respects there is nothing to distinguish this adze from scores of similar tools, but the peculiarities mentioned lead to the inference that the implement came here from the west.

It would be interesting to learn from any in Ontario into whose hands this report may fall, whether similarly made tools have come to their notice. Before I had an opportunity to examine a stone adze in its original handle, my impression was that the flat face lay next to the wood, in such an arrangement as is exemplified by figure 86, but as soon as I saw the round side fitted into a corresponding hollow in the wood it was very easy to perceive the great advantage thus derived in point of steadiness to the head, when the tool was in use. In the same way one may readily understand how much more solidly a fluted side would fit into a receptacle, than a smooth one would.

#### CHISELS OR CLUB SPIKES.

Such small cutting tools as are represented by figures 14, (24,291 Wintenberg), 15 (T. W. Beeman), 16 (7,493 G. E. Laidlaw), and 17, (24,306 Wintenberg) are not at all common, and yet, their seeming rareness may be owing to their small size to some extent, for a



Figs. 14 (24,291), 15 (164), 16 (74,930), 17 (24,306), full size.

specimen of this kind might easily be overlooked in a heap of earth. All those referred to were found on the surface. By all odds the best is the Beeman specimen, for it is as carefully formed and finished as are many of the larger tools of a similar shape. It is difficult to imagine any mechanical use to which such diminutive specimens could be put, and it has been suggested that in all likelihood they were made to insert in club-heads.

#### STONE GOUGES.

Much has already appeared in our reports respecting gouges, specimens of which vary even more in general form, as well as in detail, than any other kind of stone tool found in Ontario.



Fig. 18 (9,852) full size.

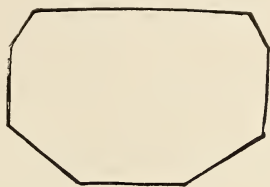


Fig. 19. full size.



Fig. 20 (19,831) 3-5 dia.



In several respects the one illustrated by figure 18 (9,852) is the best in our collection. The stone is a dark brown argillite, a little over eight inches long, while the greatest width is an inch and five-eighths. It is very neatly hollowed as far back as three inches from the lip, and it tapers more rapidly than most gouges do, towards the head.

The chief peculiarity, however, consists in the chamfering which



Fig. 21. (9,895) 5-6 dia.



Fig. 22.

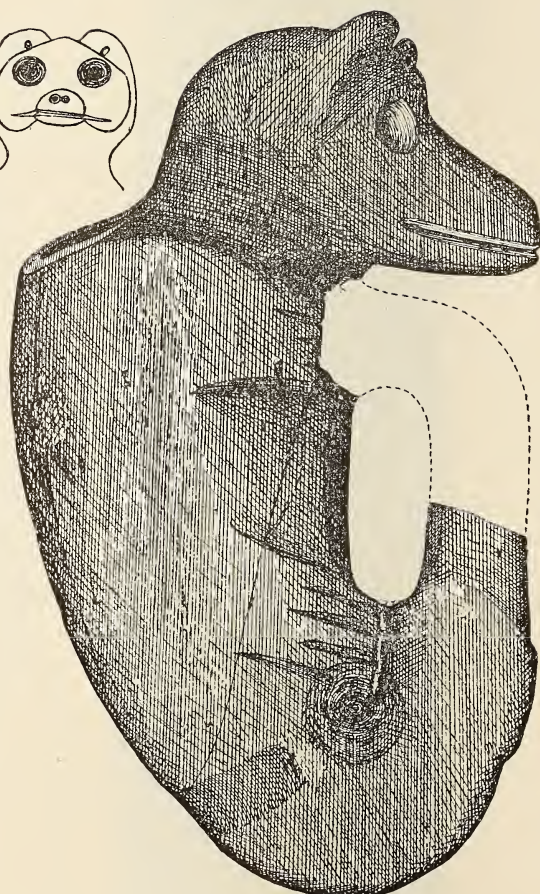


Fig. 23. (26,754)  $\frac{3}{4}$  dia.

has been done on all the corners, and especially on the back ones. The diagram of a cross section, nearly half way down, (fig. 19) shows the extent of this work.

This beautiful implement was noticed in the report for 1894-5, p. 68, but the illustration was a very poor one.



Figure 20, (19,831) represents a kind of stone tool somewhat uncommon, serving as it did for a gouge at one end, and for an axe or adze at the other.

Tools of this kind were probably held directly in the hand when in use.

Figure 20 is the largest we have of this axe-gouge type, and was procured for use by Mr. Aubrey White, Deputy Commissioner of Crown Lands, when he was at Lake Temagaming, in Nipissing district. In general appearance it resembles others of this kind, but is considerably larger, being more than ten inches long, while it is two inches and a half wide, and an inch and a quarter thick. It is of slate.

Of the same type as far as the double duty is concerned is the specimen figured by 21, (9,895), but in other respects it is totally different. The stone is a gray granite, a much harder, but not necessarily more difficult kind of material to work than slate, and one which was, perhaps, not capable of retaining its edge so long.

This tool is six inches and a half in length, averages two inches in width, and is an inch and three-eighths in thickness at the thickest part—the back being very much rounded lengthwise as well as crosswise.

A peculiarity of this tool is the slight hollowing which has been done in line with the half-inch deep groove that forms the gouge end, and almost connects it with the axe end.

The latter is peculiar, too, in having the corners of the axe edge slightly flared, an effect we sometimes see as the result of hammering on the edge of native copper.

This specimen was found in the township of Tiny, and was presented to us by Mr. James McCrossen, warden of the reformatory, at Penetanguishene.

The small gouge, figure 22, is a very good example of the old workman's make-shift. The piece of stone from which this tool was made is even yet little better than an accidental form, the broad end of which is hollowed. A little rubbing down, too, has also been done on the lower side. The material is Huronian slate. When seen from the other side, this little tool is much less symmetrical than it appears to be in the cut. It was found in Victoria county, by Mr. G. E. Laidlaw.

#### STONE PIPES.

By all odds the largest, and in some respects the most remarkable effigy stone pipe, or pipe-bowl, ever found in Ontario is the one here illustrated, figure 23, (26,754). It was a surface find by Mr. T. W. Newberry, on lot 6, concession 20, in the township of Tiny. From his hands it passed to those of our friend, Lieut.-Col. G. E. Laidlaw, from whom we procured it. It is six and three-quarter inches in height, and weighs two and a half pounds. The material is of a dark gray colour, not very hard, and suggests Trenton limestone, but it does not answer to the acid test.

This huge specimen differs very much in many ways from the large Huronian slate pipe presented to us last year by Mr. Cary W. Hartman, although in a general way the idea involved in the shaping of both has been similar.

Only for what may be regarded as its long tail, we might suppose a bear to be the animal represented, and even should we take it to

be intended for a wolf, the same difficulty exists though to a less extent. Unfortunately fully half of the tail has been broken off and lost, but from the appearance of other specimens somewhat alike in form, as well as from the two fractures, we are safe in marking the supposed outline of the complete appendage.

Touching what has recently been brought up relating to the origin of stone, effigy-pipes, one is disposed to wonder what could have been the European prototype of such a specimen as this is. The surface has been brought to a condition of smoothness, but not sufficiently so to remove all traces of the scratches that were made in so doing, and in no case are there any signs of marks other than those producible by the rubbing of one stone on another.

The design is boldly carried out, but there is no nicety of detail. On each side, between the hind feet and the tail, there is the beginning of a hole.

There can be no doubt at all as to what this specimen was meant to be, although it is unfinished, for the beginnings of a large hole on the upper end, and of two others on the back, show that the maker wanted to produce a pipe. One of the two holes begun on the back is near the lower end, and was, of course, for suspension, and for attachment to the wooden stem.

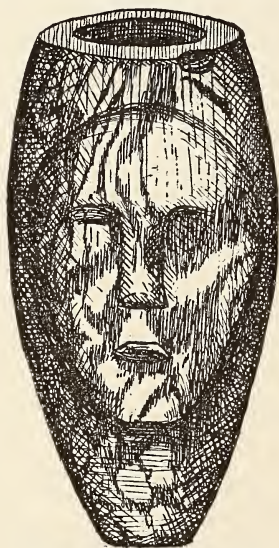


Fig. 24, (26,205) full size.

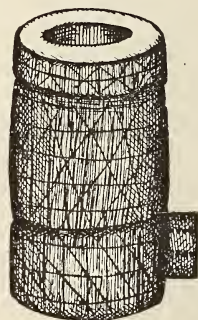


Fig. 25, (26,997) full size.

Palæontologically figure 24, (26,205) is quite as interesting as it is archæologically, for the piece is of black marble thickly studded with small corals, not nearly so many of which appear on the face and back as on the sides, where they are also much less in size than those seen in the cut.

I am indebted to Dr. W. A. Parks of the Toronto University Geological Department for the opinion after a somewhat hasty examination, that the organisms represented in this specimen include *Diphyphyllum stramineum*, and a species of stromatopora.

Found in the very heart of the old Tobacco Nation, Nottawasaga, where the diversity of pipe-forms is not surpassed by that of any



other district on the continent, we are the better prepared to understand that pipe modelling was regarded as a "fine art," and that the stone used in making this intended pipe was regarded by the primitive artist as a gem.

The original of figure 24 was presented with numerous other specimens to the Provincial Museum by Mr. F. W. Storry, an ardent and intelligent student of old times in the Huron country.

It is not unlikely that the soapstone pipe-head of which figure 25, (26,997) is a diagram, was made by a white man, or by an Indian of comparatively recent date, and acted upon by some measure of "white" inspiration.

It was found in the township of Drummond, Lanark county, and was procured from Dr. T. W. Beeman. The Rideau Valley must always have been a favorite Indian resort, on account of its immense importance in connection with the fur trade, for here were found in considerable numbers not only the larger, wild animals, but the smaller, though equally valuable ones, including the mink, musquash, and beaver. Almost from the landing of Cartier at Hochelaga—certainly before the founding of a city there—the fur-trader looked to the Rideau Valley as a source of trade—barter; and, as a matter of course, the natives were conversant with French conditions of life long before the more westerly peoples had even seen a white man. We accordingly find throughout this district more numerous evidences of white contact, than in most other parts of the province, although the Beeman, and some smaller collections contain many examples of purely Indian production.

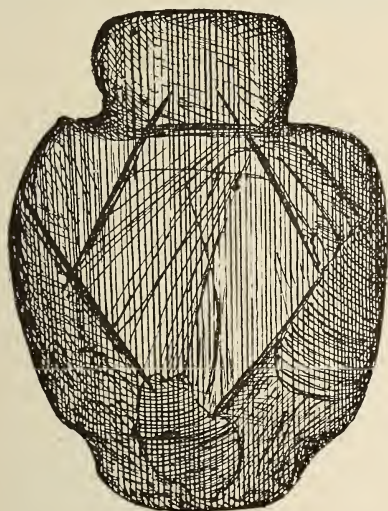


Fig. 26, (25,154) full size.

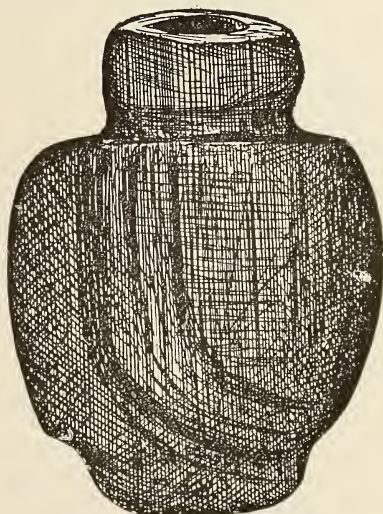


Fig. 27, (25,154) full size.

Unless the object of which two diagrams are shown here, figure 26 and 27 (25,154), was meant to be the head of a smoking pipe, it would not be easy to guess for what else it was intended. It is made of Huronian slate, but notwithstanding the favor in which this kind of stone was held for various purposes, pipe-making was not one of these, if we may judge from our own collection, not more than five or six per cent. of the stone pipes or pipe-heads being made of this material.



The somewhat poorly bored hole is half an inch in diameter, and an inch deep, and to make it serviceable for smoking purposes it was only needful to bore a shallow hole to meet it through one of the sides.

Figure 27 shows a side that has been fairly well rounded and smoothed, but the workman either changed his mind, if he set out to make a pipe or the object fell into the hands of another person, who seems to have made a beginning towards cutting away what he regarded as superfluous material with the intention of forming a lozenge-shaped bowl, as may be guessed from the marks on the side, figure 26.

This somewhat curious specimen came to us in the J. P. Hunt collection, and was found in Middlesex county, Ontario.

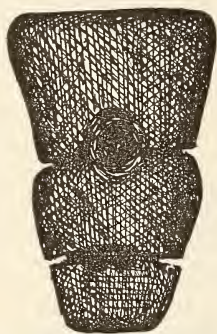


Fig. 28 (19,330) full size.

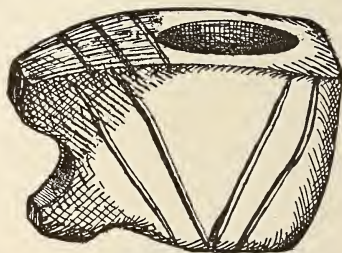


Fig. 29 (21,587) full size.

What is, in some respects, among the oddest of our stone pipes, or pipe-heads, figure 28, (19,330), forms a part of the Laidlaw collection, and was found with other specimens by Mr. W. C. Perry, on lot 45, concession 8, township of Eldon. It is of soapstone, but is peculiar in being deeply incised, by means of two cuts surrounding the head, and these were made probably with chert or flint flakes. The cuts are apparently the work of one who was a much less skillful craftsman than was he who first fashioned the bowl, for while the original form of the latter was accurately symmetrical as such things go, the former have been very clumsily made, and the cutting-down done by the second workman is quite meaningless. It has been suggested that all the secondary work was done by one who stole the pipe, and was anxious to change its appearance.

Among stone pipe heads a very simple form is that of figure 29 (21,587), found by Mr. Neil Sinclair, on lot 25, concession 2, township of Fenelon, county of Victoria.

This one was made of fine-grained limestone; in shape it is non-descript, unless one's imagination be strong enough to see in it a rough resemblance to the head of some creature, through the open mouth of which the stem-hole has been bored. The rudely incised ornamental lines are not similarly arranged on each side. On the side opposite to the one shown in the cut there are five lines roughly scratched perpendicularly.

## CLAY PIPES.

Everybody who has paid the least attention to the archæology of Ontario must have observed that it is mainly on pipe-heads that

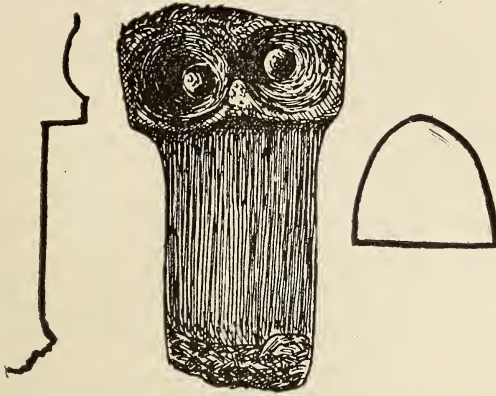


Fig. 30 (19,331) full size.

the Indian made any efforts to reproduce animal forms. Men, bears, wolves or dogs, eagles, hawks, owls and pigeons were favored as models. Seldom more than the head was attempted, and in numerous instances we are at a loss to specify what animal the savage modeller had in his mind. Among the most easily distinguishable are those meant to represent the owl, and figure 30 (19,331), exemplifies what is perhaps the crudest form in which it is possible to

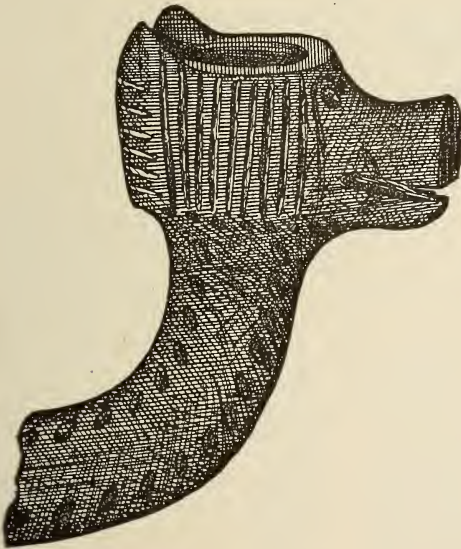


Fig. 31 (26,940) full size.

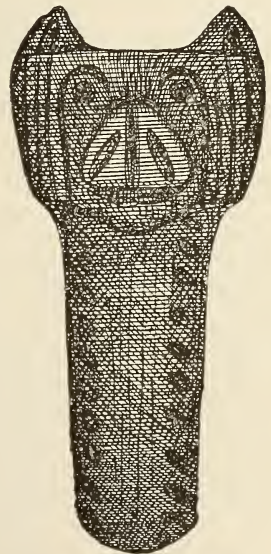


Fig. 32 (26,940) full size.

imitate in clay, the head of this bird. The apparently disproportionate large eyes have caught the pipemaker's fancy, and these he has tried to imitate by making two deep hollows, near the middle of each of which he has formed a hemispherical tubercle to represent the pupil.

The side of the pipe shown is flat below the eyes, which are moulded on a portion that projects about three-sixteenths of an inch, as is shown by the outline to the left, and the other side is rounded as may be seen by the outline of cross-section, to the right.

At first the pipe was moulded with a stem, perhaps not more than two or three inches long, but this having been broken, a hole has been bored in the round side to receive a stem of wood, or of bone.

This somewhat odd specimen was found on lot 44, S.P.R. Eldon township, Victoria county, by Mr. W. C. Perry, now of Winnipeg, and presented by him to the museum.

Figures 31 and 32 (26,940), represent a clay pipe differing in several respects from anything else of the kind in our cases. The square-like muzzle, the ears, and the arrangement of decorative lines on the head all vary more or less from other Huron specimens.

The stem, as far as it is preserved, is of the true Huron-Iroquois pattern. This very good specimen was found by Mr. Frank Day on a piece of rich, low-lying land, on the third concession of Orillia township, only a short distance from the town.

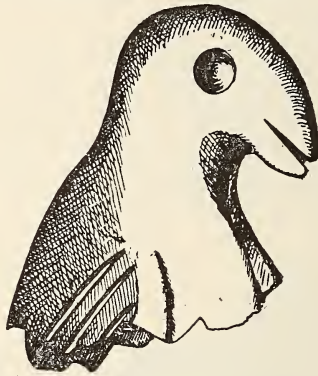


Fig. 33 (21,508) full size.

Among the many odd forms of pipes in clay as well as in stone, that form a part of the George E. Laidlaw collection in the Provincial Museum, is the fragment shown by figure 33, (21,508), found on the farm of Mr. E. W. Glaspell, lot 18, con. 13, township of Tiny, Simcoe county. As was so common, the effigy bird-head faced the smoker, as may be learned from what remains of the bowl which was formed on the breast. A few of the lines indicating wings are left.

The bowl has been formed by moulding the clay around a rough bit of wood, perhaps a branch.

It would be more than difficult to say assuredly what kind of bird this pipe was meant to look like. Perhaps, none in particular.

#### BONE.

The bone articles, figures 34 to 36, are commonly regarded as whistles, the only reason being that they look more or less like these simple musical instruments. Attempts to use them as the name suggests, prove failures, although in some cases it is possible to produce sounds with them by closing one or two of the apertures where



there are respectively only two or three. Occasional results of this kind do not prove the original purpose to have been that of a whistle, any more than that tubular door-keys were so intended. When the holes are numerous, a suggested use of the bone is that of a receptacle for feathers, porcupine quills and the like, for personal decoration, perhaps more especially about the head. Employed in some such way, it would be easier to arrange the ornamenting material in one of these and then to fasten it to the hair, than to insert single feathers in the hair without any support, and this would apply with greater force when the person to be decorated had to do the decoration for himself. This is not by any means offered as a theory as to what was the use of such bone objects, but merely to show that there are possible uses besides that of a whistle, and thus to place inexperienced observers on their guard against accepting the too frequently made assertions that this or that was so-and-so, when the truth is that we know absolutely nothing about it.



Fig. 34, (6,326) full size.

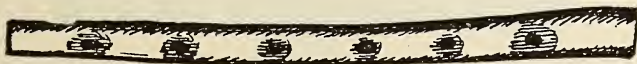


Fig. 35, (25,505) full size



Fig. 36, (27,019) full size.

Most specimens of the kind are made of large, bird wing-bones, apparently for the sake of lightness, and, no doubt, also because of their thinness, which rendered the boring or cutting of side holes comparatively easy.

Figures 37, (12,887), 38, (16,622), and 39, (11,687), while made from similar bones, would seem to have had a totally different use

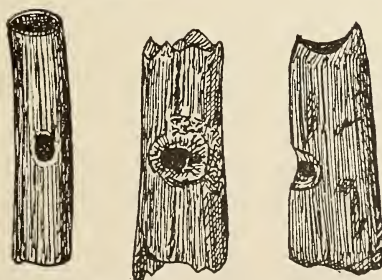


Fig. 37, (12,887). Fig. 38, (16,622). Fig. 39, (11,687).

whatever that use may have been, and yet it is possible that even this surmise is wrong. We have in the Provincial Museum hundreds of what we call bone beads, from an inch to six inches long, but these are seldom found with side holes as shown in the cuts.

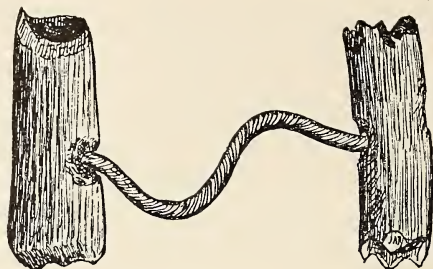


Fig. 42. Full size.

Such small specimens are also called whistles. To me they suggest that they were used as buttons, in the way shown by figure 42.

The two specimens illustrated by figures 40, (16,620), and 41, (16,621), are presumably of post-European origin. Figure 40 seems



Fig. 40, (16,620) full size.



Fig. 41, (16,621) full size.

to have been indebted to a steel knife for its clearly cut quadrangular hole, and the same may be said of figure 41, the ornamentation of which is also suggestive of the white man, although the work may have been done by an Indian.

Figure 34, (6,326), is from a kitchen midden on Vancouver Island, British Columbia.

Figure 35, (25,505), and figure 36, (27,019), were found on lot 11, first range south, Hamilton road, Brantford township.

Figure 37, (12,887), Woodhouse township, Norfolk county.

Figure 38, (16,622), Old Fort, Whitechurch township, York county.

Figure 39, (11,687), Essa township, Simcoe county.

Figure 40, (16,620), and 41, (16,621), were presented by Dr. W. L. T. Addison, and are probably from York county, perhaps from Whitechurch township.

That some Indians did use bone whistles or flutes we gather from Brown's *Canoe and Camp Life in British Guiana*, p. 158, where this sentence occurs:

"Our approach to a village was always announced by some of our Indians playing a sort of tune on their bone flutes, and our entry into it by their shouts."

Elsewhere it is stated that Guiana instruments of this kind are made from the jaguar's thigh bones.



Fig. 43 (24,191) full size.

What we have called a "carved bead" is illustrated by figure 43, (24,191), in the Wintemberg collection, and was picked up on a village site, lot 23, concession 10, township of Blenheim, Oxford county. It resembles a much larger example, fully six inches long, found by Mr. W. G. Long near Eglinton, in York township, and which is too large to have been used as a bead. The Wintemberg specimen is evidently of considerable age, as it is much weathered, and the side not shown in the diagram is, to some extent, decayed.

#### BONE ARROW.

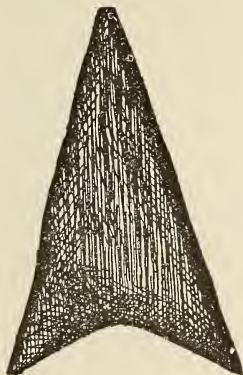


Fig. 44 (26,965) full size.

Figure 44, (26,965), is arrow-like in form, but may have been used as a scraping tool, or in the splitting of splints for basket-making, or for some other simple, but, to us, unknown purpose. As a matter of course, we cannot be sure that it was not used as its appearance would suggest, in which case it would belong to the class popularly known as "war-arrows," because, being without a neck, the saying is, that when a man was struck with one, the head would remain in the body, on an attempt being made to remove it by pulling on the shaft. This is a somewhat ingenious and plausible conceit, but without a particle of proof.

If the specimen here figured was ever used in shooting, it is just as likely as not that it was extemporised owing to the want of better material.

Forms of this kind in bone are very rare. This one was found by Aubrey McPhee, on lot 1, con. 6, North Orillia.

#### BONE COMBS.

In our report for 1903, pp. 80-86, the ground was taken that the Indian made combs before he ever saw, or had ever heard of a white man. In opposition to this view Dr. Beauchamp said, p. 86, "I do not believe any New York or Canadian Indian ever made a bone



comb until he had European hints. . . As soon as he had saws, teeth and ornaments multiplied."

The contention of Dr. Beauchamp is simply this, that without metallic tools it was impossible to make a comb, and the inference is that before the appearance of Europeans, the Indians had no use for any article of this kind.

In other parts of the world where archæological research has afforded evidence that the early peoples were in conditions, or stages of development similar to those that characterised primitive life in this country, that is to say in the stone period, combs were undoubtedly made, not of high quality it may be admitted, but possessing all that was required for the disentanglement of shaggy or matted locks.

Shortly after the appearance of our last report Prof. Petrie, the celebrated Egyptologist, was good enough to write as follows:

"UNIVERSITY COLLEGE, LONDON, W.C.

DEAR SIR,—On reading your interesting report of 1903, I can at once answer your debate as to the possibility of the bone combs, figs. 45 to 50, having been made without steel tools. They are very closely like the prehistoric Egyptian combs, made when copper was scarce and little worked, and no other working metal known; it is certain that flint must have been the tool material. I add some outlines for you to compare, only don't set off some wiseacres proving that the Amerinds came from Egypt, 6000 B. C.!

Yours sincerely,  
WM. FLINDERS PETRIE.

Figures 44 to 46 are reproductions of Mr. Petrie's outlines, and one cannot help seeing the resemblance they bear to the shapes of



Fig. 44.



Fig. 45.



Fig. 46.

Canadian combs which we claim it was quite possible to make, and frequently were made, without the assistance of metal tools.

The impossibility of accepting Dr. Petrie's advice respecting the "wiseacres," is much to be regretted, for the old women to whom he refers will almost certainly come to some such conclusion as he deprecates, unless they either take his indirect warning to heart, or, what is more likely, ridicule the belief that there could be people in Egypt so long ago as six thousand years, B. C.!

Some of the other combs found in Ontario are here illustrated.

Figure 47, Laidlaw collection, is very rude in general form, but it is the only specimen of its kind having the teeth rounded, and otherwise well finished. It has been asserted that these bone combs were more for ornament than use, but this one at any rate does not support such a view. Ornamentally it would be useless, if for no other reason than that the teeth are not only so smooth, but so short, and the body of it is too long and heavy to be carried in the hair for decoration, while it is well adapted for use as a "redding comb."

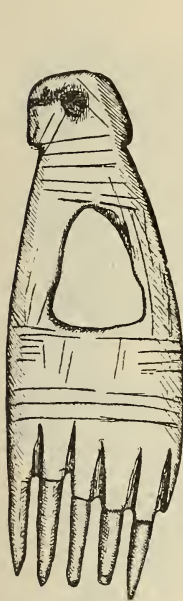


Fig. 47.  $\frac{2}{3}$  dia.



Fig. 48.  $\frac{2}{3}$  dia.

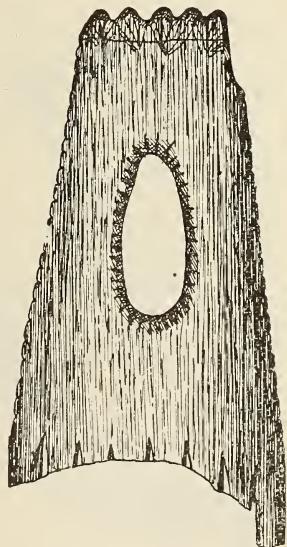


Fig. 49 (9.590).  $\frac{2}{3}$  dia.

Figure 48 was found on the Walker farm, Brantford township, and was not associated with anything of European origin, although all that is left of the worked out pattern on one side has a somewhat un-Indian look. In this case, too, an attempt has been made to round the teeth, but not at all in the way shown by figure 47. The upper part is unfinished, and beyond the depression already referred to (which it may have been the intention to finish as a hole, like that in the preceding figure) there is nothing by way of decoration. What renders it probable that it was the maker's desire to form a hole here is that the work is done on the rough, or concave side of the bone. Some Indian mechanics, however, when about to make large openings did so partly by means of drilling a small hole at each corner of the intended aperture, and sometimes they even made a row of holes along the line of piece to be removed.

Figure 49, (9,590), is from the same locality as is the specimen last mentioned. Unfortunately the teeth have left little more than traces of their former presence, but the one of which most remains, shows that they have been well rounded and polished, clearly for combing purposes and not merely to be stuck in the hair, for in the latter case the comb would hold better if the teeth were left flat-sided, and otherwise rough. There has been a rude attempt at ornamentation by scalloping the upper end, by slightly notching the two edges, and the margin of the hole, and by four small triangularly scratched patterns at the head. On the other side, and just opposite these, there is a criss-cross arrangement, through which two roughly parallel lines run from edge to edge.

This is the only one of the six Canadian combs illustrated, which shows anything suggestive of file-marks, because of their regularity, but as these cross a hollow, at the deepest part of which they are quite as sharp as they are anywhere else, they must be otherwise accounted for.

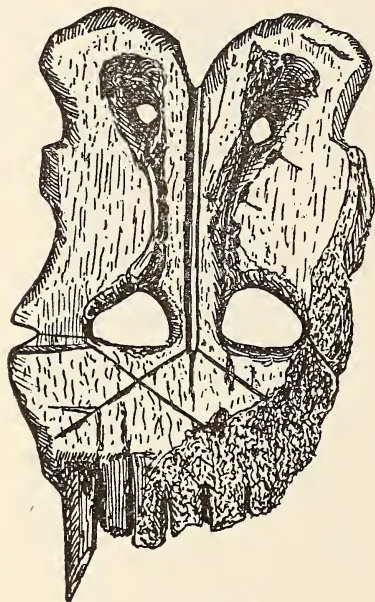


Fig. 50 (8,071) full size.

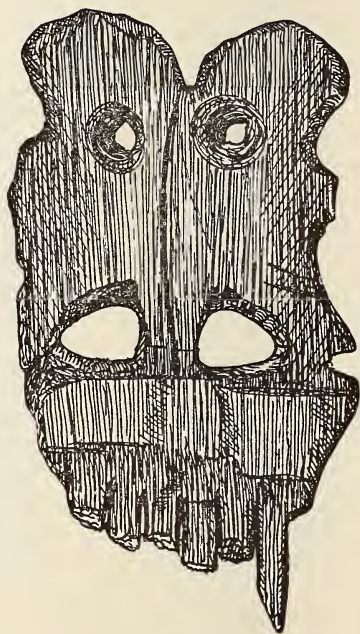


Fig. 51 (8 071) full size.

What is in most respects one of the most rudely-formed combs in the museum is illustrated by figures 50 and 51, (8,071). It was found in the Attawandaron country (Brant county) by Mr. F. W. Waugh. On this specimen there is not a single trace of work which could not have been done with flints. Even the two small holes at the top have not been bored, but have been made by scooping the material on each side, and that, mostly on what was the inside of the bone, as may be seen by figure 50. Neither the edges of the comb itself, nor those of the larger holes, show the least mark of attempt to smooth, or finish.

Figure 52, (23,379), shows the form of a somewhat elegantly shaped comb head, suggestive of European origin. All the curves



are graceful, the edges are well finished, the front portion is too slender to have been worked with stone tools, and all that is left of

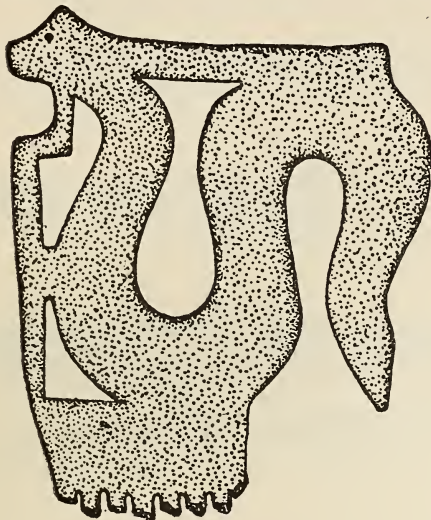


Fig. 52 (23,379) full size.

the teeth indicates the use of a metal saw. There is no attempt whatever at surface ornamentation.

The comb was found by Mr. Paul Taylor, at Taylor's Point, Sandwich, Essex county, and was associated with other objects, which, although of stone, were evidently indebted to "white" contact.\*

## ARE THE PERFORATED BONE NEEDLES PREHISTORIC?

BY W. J. WINTEMBERG.

There are over sixty specimens of so-called bone needles\* in the Provincial Museum. It is hard to say whether this was their real use, as their form suggests that they might also have been used as a sort of shuttle in weaving. Mr. Boyle, in his "Notes on Primitive Man in Ontario," (p. 73), in speaking of his figure 189, says: "It was almost certainly employed in the netting of snowshoes, and in the making of grass mats, for passing the binding string or thong of sinew- or root-fibre in and out among the stalks of grass as they hung suspended from a bar in front of the workers. It is therefore more like a shuttle, although it was not shot." As they are nearly all perforated at the middle they could more easily be grasped by the right or left hand as they were passed back and forth in and out among the fibres forming the warp.

These needles are from three to over five inches long. There is a very large specimen in the Oronhyatekha Historical Museum, Toronto, which is over ten inches long and about three-fourths of an

\*See Ontario Archæological Report for 1901, pp. 20, 21.

†Mr. Wintemberg here limits the name "needles" to specimens having "eyes". It is not unusual, however, to call what are otherwise known as "awls" or "perforators" by this name.

inch wide, and nearly three-fourths thick. It has a perforation near the middle. This specimen, owing to its size, could not have been used for any other purpose than weaving.

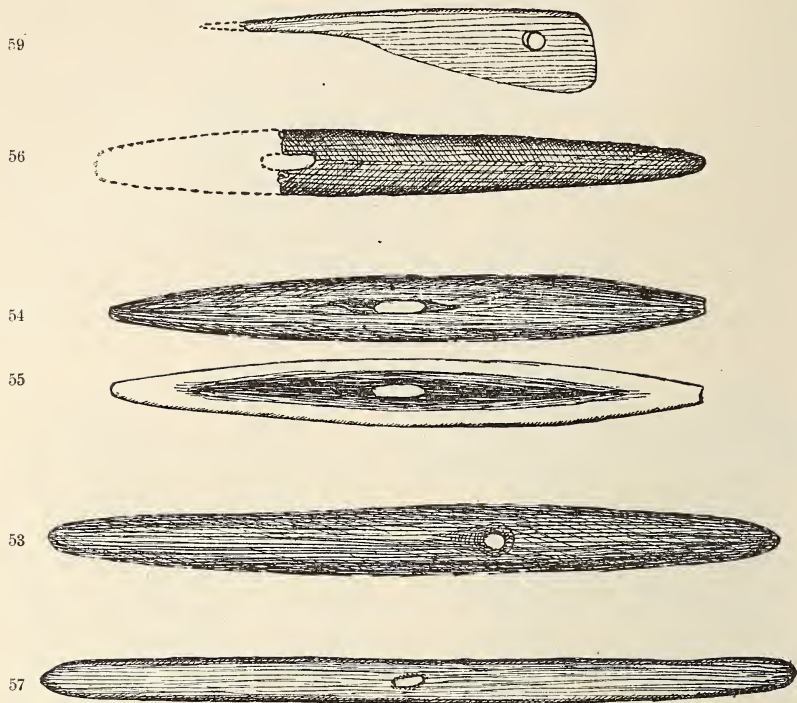


Fig. 53 (7,077) full size. Figs. 54, 55 (16,845), both sides, full size. Fig. 56 (25,045) full size. Fig. 57 (25,495) full size. Fig. 59 (25,191) full size.

Figures 53, (7,077), 54, 55, (16,845), 56, (25,045), and 57, (25,495), represent typical specimens in the Provincial Museum. Figures 53 is from York county; figure 55 has a long groove on one side and is from the same county; a specimen, triangular in cross section, shown in figure 56 is from Brant county; and figure 57 is from the Sealey farm near Brantford.

The holes in these needles are not all circular as in most other prehistoric artifacts. They are usually elliptical and, in some examples, pear-shaped. The former shape is the same as that in the steel needles of the present day, and we might safely assume that it was copied from a European prototype. There are even some needles that are grooved in the eye (figures 53 and 55 for example), but this may have resulted from the wearing of the thread.

Ontario is not the only region where they are found, for they are quite plentiful in the State of New York. Beauchamp's "Horn and Bone Implements of the New York Indians" gives figures of needles almost exactly like those found in Ontario, his figure 118 representing the Ontario examples more than any other. It is evident from this that they are confined to localities formerly occupied by the Iroquoian family of Indians.

There are two eyed needles in the museum here which are made of strips of sheet brass. One (figure 58) is from the Walker farm

in Brant county, the other (5,714), is imperfect, and comes from Nottawasaga township.



Fig. 58 (19,848) full size.

The specimens in the Provincial Museum come from Norfolk, Brant, York, Simcoe, Ontario and Victoria counties, where post-European relics, such as iron axes, brass kettles, glass beads, and other evidences of European contact are most abundant. Three of the needles figured by Dr. Beauchamp come from prehistoric sites, and one only from a site where post-European articles are met with. Of the five others figured by him he does not state the sites were prehistoric or not.

As far as we know no perforated needles have been discovered farther west than Brantford. We will take, for instance, the prehistoric village sites in the counties of Oxford and Waterloo, with which the writer is most familiar, and which are admittedly Attiwandaron or Neutral; the same race as the former inhabitants of the Brantford district. But not a single bone needle has been found, nor are there any in the museum or in any private collection which came from sites in these two counties. Instead of these we find only plain bone awls, not perforated, and used in the same way as in the eyeless bodkin of the modern Kaffir. Figure 59 is a perforated specimen which comes from Hyde Park, London township. It is the only one in the museum which, although perforated, is not of the typical form.

Of course, although doubting that these needles were used by the Iroquois in prehistoric times, the writer would not say that they were incapable of inventing such a simple tool as an eyed needle. To do so would mean that they were utterly devoid of ingenuity or inventive ability. We may ask, however, why—if these needles are an Iroquoian invention—they are not found more generally both on their prehistoric and post-European village sites? But, as has been stated before, many are from sites where they have been found associated with European articles, and to be convinced one need only look at the relics of iron, brass, lead and glass which have been discovered on the Sealey and Walker farms (Brant county), where a large number of these needles come from. However, specimens have been found in other parts of the continent, which are prehistoric. Mr. Harlan I. Smith discovered them in shell heaps in British Columbia. He says: "Needles made of bone, both fine and coarse, were found in the graves, and scattered through the ground. Each of them was provided with an elliptical eye, with its major axis lying in the axis of the needle.\*"

\*Archæology of Lytton, British Columbia, Records of the Past, July, 1902.



In "Records of the Past," (Washington, D.C.), for March, 1904, Mr. Smith illustrated several needles (figures 20, 21 and 22, p. 85), which resemble the Iroquoian specimens very much; fig. 22 being almost like some in the Provincial Museum. Sir J. W. Dawson figures an ancient Hochelagan specimen in his "Fossil Men and their Modern Representatives," and others have been met with in the mounds of Ohio; but they all, except those found by Mr. Smith, differ from the Ontario and New York needles in having a circular eye through one of the ends and not through the middle. The Iroquoian specimens also are very thin, none of them being more than one-sixteenth of an inch thick, while the other examples are usually thick and more like the heavy bone awls.

[With all due respect to the opinions of Mr. Wintenberg, it seems utterly unreasonable to claim a European origin for eyed, bone needles, if this is what they were. As Mr. Wintenberg mentions, they have been referred to as shuttles, but we are not sure that even this supposition is correct. Mr. Wintenberg, speaking of the oval holes in these so-called needles says "we might safely assume that they were copied from a European prototype," but if he could find a European needle of the right date, say 16' or 17' anything, he would likely find a round, not an oval hole. It is inferred that the whole instrument or tool, or whatever it may be, is an imitation of *something* European, but what was the something. We might just as well claim a European origin for the idea of our stone gouges because they are hollow, or for anything else, because it may happen to be sharp, or blunt, or straight, or crooked, or round, or square, many things so characterized having been known to exist in Europe at one time! However, Mr. Wintenberg is a close and intelligent observer, and his remarks are worthy of consideration. D.B.]

#### PENDANTS.

The forms of what we called pendants varied greatly, and were probably made to adapt themselves to the natural shapes of water-worn stones, or to the adventitious direction of a fracture when the material had to be split, or otherwise broken. In not a few cases pebbles in which a hole was worn were chosen, and used without a particle of workmanship.

For some unknown reason many of us exhibit a desire to pick up pebbles so marked, and examples of the kind are often carried as "pocket pieces." Sometimes such stones are so artificial in appearance that it is difficult to believe in their purely natural production.

Mr. Matthew Teefy, the doyen postmaster of Richmond Hill, found on Toronto Island, fifty years or more ago, a specimen closely resembling a finger-ring, in size as well as in appearance, and he has carried it during all these years as a watch pendant.

Stone worship in past ages was, in many cases, identified with boulders or other rock specimens through which, by natural means,

a perforation had been made, but why was it supposed that fetishness, or sacredness was inherent in stones on this account?\* Was it yoni?

Figure 60 (7,496), is another example of the adaptiveness in question. The adventitious shape of an argillite pebble has suggested a pendant of some sort—it may have been an eardrop—a little

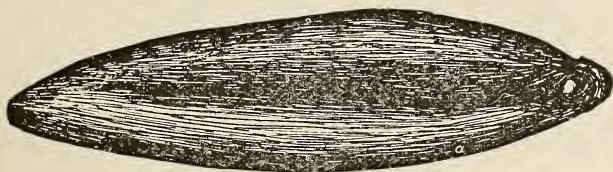


Fig. 60 (7,496) full size.

smoothing has been done, a hole bored, and here is the result. The specimen was found by Mr. M. Brown, on the shore of Lake Rideau, and came to us through Dr. T. W. Beeman.

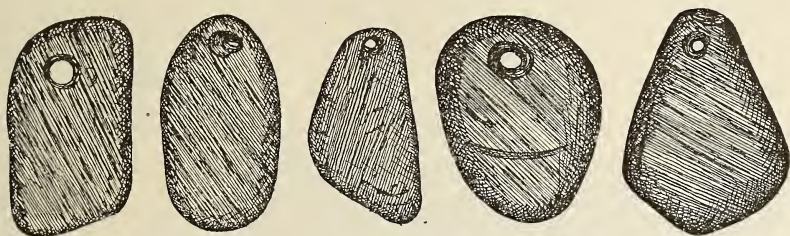


Fig. 61, (20,133). Fig. 62, (24,413). Fig. 63, (25,149). Fig. 64, (24,500). Fig. 65, (10,745)  $\frac{3}{4}$  dia.

Other examples are illustrated by figures 61 to 67 in some of which the naturally worn hole has been improved a little, but in the others there does not appear to have been any work put on the stone at all, even so far as the shape of the pebble itself is concerned. All these pendants are flat—slaty. Such “adderstones” are found on village sites in almost every part of the province.

Figure 66, (26,184), shows both sides of a similar pebble on which some decorative attempts have been made, although much less distinctly than the engraving would indicate. Indeed, without the aid of a magnifying glass the pattern is barely traceable. The seven notches on the lower edge may be ornamental in intention, or they

\* In Scotland, and probably elsewhere in Europe, naturally perforated stones were known as *adderstones*, the belief being that the holes were produced by the stings of adders. Some young folk may not know that serpents or snakes never sting—they only bite. What is called the sting is the creature's tongue. The adder is a small snake, seldom more than two feet long.

In Leyden's (?) *Cout of Keeldar*—a ballad—the sixth verse reads:

“No danger he fears, for a charmed sword he wears;

Of adderstone the hilt;

No Tynedale knight had ever such might,

But his heart-blood was spilt.”

And in verse 54 we have:

“In Keeldar's plume the holly green,

And rowan leaves not on:

And vain Lord Soules' sword was seen

Though the hilt was adderstone.”

may have been meant for a record. This somewhat interesting little specimen was found on lot 8, Beasley's new survey, Blenheim, Oxford county, by Mr. H. Z. Smith, of New Hamburg.

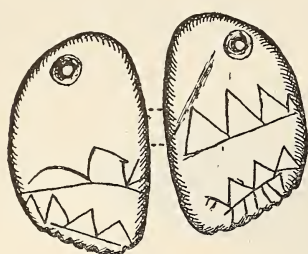


Fig. 66 (26,184).

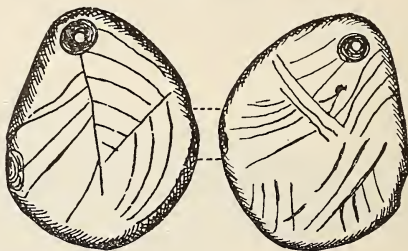


Fig. 67 (20,130).

A better marked example of this kind is from the Sealey farm, Brant county, where Mr. W. Dick picked up the pendant shown by figure 67, (20,130). It is of a dirty brown, somewhat resembling catlinite. The lines are very much confused.



Fig 68, (26,245) full size.

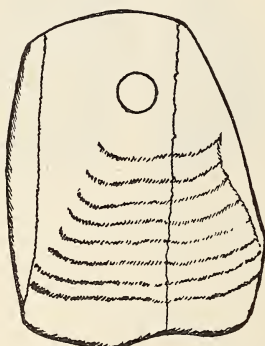


Fig. 69, (24,394)

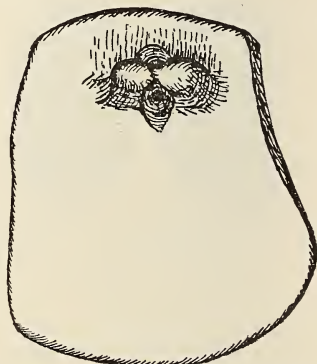


Fig. 70, (25,518) full size.

In figure 68, (26,245), we have a diagram of a very small animal form, probably a turtle, made from a piece of brown slate such as was used largely among the Tobaccos in bead-making.

It was found by Mr. Fred. Storry on lot 12, concession 7, Notawasaga.

In working out the details, the man who carved this little specimen was at pains even to form a mouth on the sixteenth of an inch thick material.

#### TURTLE SHELL PENDANT.

We seldom find anything made from "turtle shell" among aboriginal products, not including, of course, the dance-rattles. Archæologically we do not find the rattles, unless very rarely. In the museum there is but one specimen of this kind taken from a grave on lot 34, concession 7, Beverly, formerly the farm of Mr. James Dwyer.

Figure 69, (24,394), represents another exception in the form of a bangle or pendant, probably from part of the carapace of *Chrysemis picta*. It was found on the Colemar village site in Blenheim township by Mr. W. J. Wintemberg.



## SHELL OBJECTS.

When the Ontario aborigines wanted to make anything in shell they had to go far afield for their raw material—nothing indigenous of this kind was worth the trouble of an hour's work.

Of the common unios and some small univalves some trifling use was made, but nothing requiring the exercise of much mechanical dexterity to shape. Conchs, heavy and strong, were brought many miles from what is now Florida, perhaps in exchange for furs, striped slate, and copper, but in any event they must have been a precious commodity when they reached this latitude.

Figure 70, (25,518), is an odd piece of shell work, very likely a neck pendant, or an ear drop, near one end of which an eye has been worked through a thick part of the shell in a way that is unique in this country, as may be seen from the diagram. The opposite side is perfectly smooth but for a few slight, half aimless looking scratches that were probably meant for a design.

The axe-like outline of the specimen is purely accidental—the result of fracture—the edges are not polished.

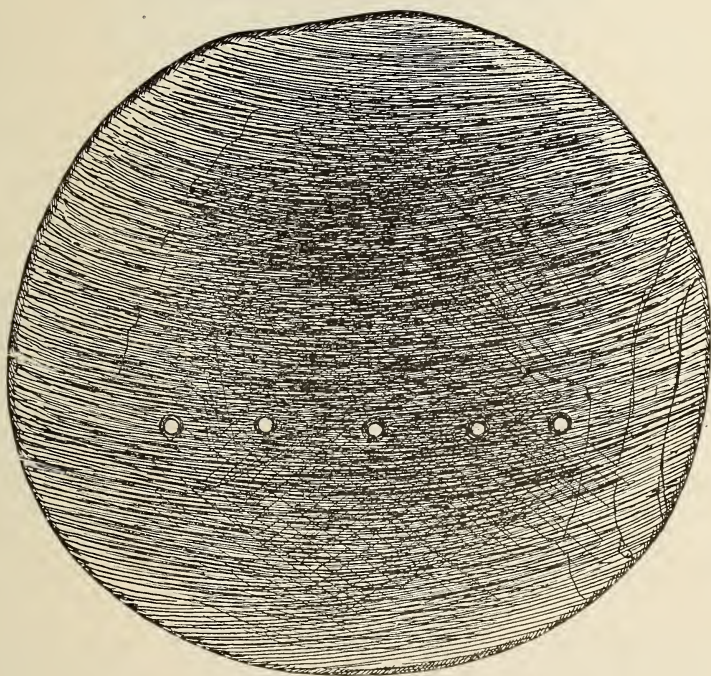


Fig. 71, (25,536)  $\frac{2}{3}$  dia.

Not the largest, but one of the largest worked shell specimens in the museum is the gorget shown by the picture at figure 71, (25,536). It is apparently made from the body-whorl of the busycon, and from what has been a very large specimen of that shell, for while the diameters of this piece are 5 1-8 and 5 3-8 inches, the depth of the concavity is less than an inch.

Beyond bringing the gorget into shape, smoothing the edges, and boring five holes in a row through it, no other work has been done, no carving, not even a line or mark of any kind for ornamental purposes.

Fully four-fifths of the convex side are coated with a what looks like iron rust.

Both of these objects were found on the Sealey farm, Brant county, Ont.

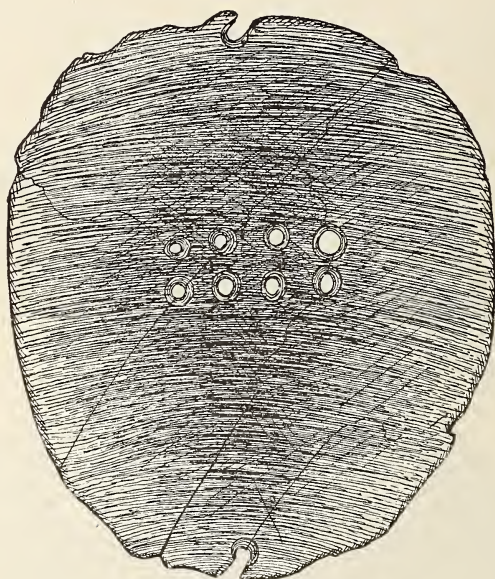


Fig. 72, (25,470)  $\frac{3}{4}$  dia.

Another shell "gorget" found by Mr. Dick on the Sealey place is shown here, figure 72, (25,470). It was in two pieces when collected with the rest of the material from the graves he opened, but it has been put together neatly, and, for two lost portions, plaster of paris has been substituted. This gorget is remarkable in having eight holes near the middle—something quite unusual. It has also had two holes bored near the margin at the extremities of the longer axis. As with all other Canadian shell specimens there is not a vestige of carving on the concave surface.

#### WAMPUM STRINGS.

The uses of beads were as various as were as their shapes, and the kinds of material of which they were made. Perhaps the original purpose was a mnemonic one. The carrying of records on the person would suggest the decorative use, followed by their employment as pledges in bargain-making, and, lastly, as a medium of exchange.

For a long time the natives of this country preferred "shell money" to European coinage, and the white man soon produced wampum, or wampumpeage, with the aid of simple machinery, in such quantities that the value decreased rapidly.



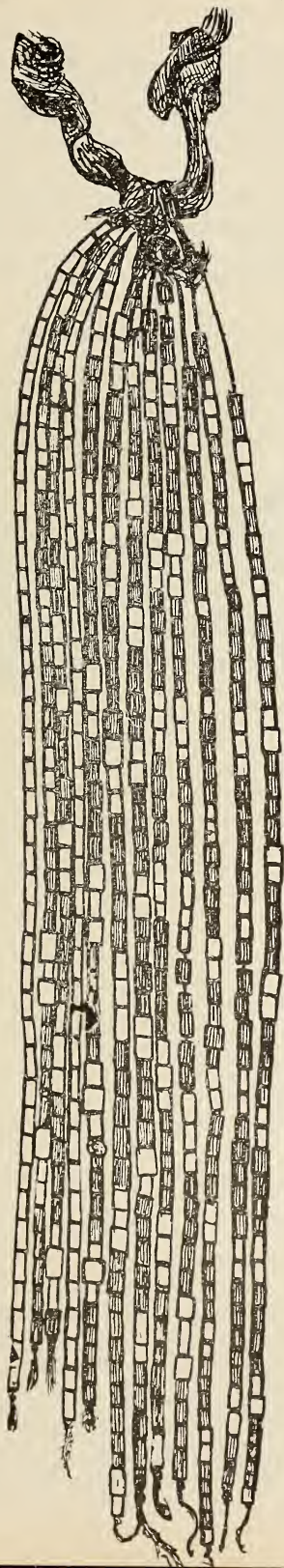


Fig 73 (27,008) a little over  $\frac{1}{2}$  dia



The accompanying illustration shows twelve strings of white-man-make wampum, each string being a foot in length, and consisting of small cylindrical beads, some white and some purple, made from a bivalve (a mussel) specimens of which are found on the Atlantic coast, having portions, or even the whole, of the interior, a dark purple.

String combinations of this kind were not at all uncommon, according to a statement made to me by the late Ska-ná-wa-ti, who was for so many years the Six Nation Firekeeper, according to whom, also, for this method preceded that of forming the beads into belts, by uniting the strings.

As long as the beads were loosely strung the records must have been purely arbitrary as to arrangement, and, therefore, quite unintelligible to any but the Firekeeper and those who were instructed by him. In belt form, however, there was room to advance a few steps, for by this method something was possible by way of making simple designs, which, although also legible only to the initiated, came nearer to the pictographic devices used in making records.

The loose string system, then, was on a par with the Peruvian *quipa*, or knotted string contrivance.

Figure 73, (27,008), represents a gift made to the museum by Mr. F. Lamorandiere, Indian interpreter at Cape Croker, through Mr. H. G. Tucker, barrister, of Owen Sound.

Mr. Lamorandiere writes that "about 1816 when the voyageurs and adventurers from Lower Canada began to be attracted to the upper country (les Pays d' en haut) to engage in the fur trade with the Indians, one M. Piché took himself to Sauging, (Saugeen). About 1818 Piché married a woman of the Chippewas (Ojibwas) of Sauging. They had no family, and when he died his widow was taken care of by Mrs. Augustine Gonneville, (more frequently called Grandeville), who was the daughter of Joseph Lange and a Cree woman. She married Gonneville, or Grandeville in the Red River country, and the two removed to Goderich, and Sauging. Mrs. Grandeville cared for her till she (Mrs. Piché) died. Mrs. Piché ingratitude for all the care bestowed on her, presented Mrs. Grandeville with these strings of wampum, saying that they would entitle Mrs. Grandeville to her (Mrs. Piché's) portion of land in the Sauging country. Augustine Grandeville died after raising a very large family, and his youngest daughter got married to Francis Benoit, who died near Sarnia. Mrs. Benoit took charge of her mother until she (Mrs. Grandeville) died, having bequeathed to Mrs. Benoit the strings of beads, repeating the words of Mrs. Piché, that the wampum would entitle her to one share of land in Sauging territory.

"Mrs. Benoit became Mrs. F. Rocher de Lamorandiere.

"The land claim was never acted on, as there was no need of doing so, because land was then cheap.

"It may be well to remark, however, that the gift of these beads from one tribe to another, or an individual to another, was regarded as very solemn and binding, and a compact made that way was never broken.

"Having no use for the beads except in remembrance of my late wife, and as a memento of the old times, I freely donate them to the Department of Education to be placed in the Provincial Museum, or any other place, as the Curator may think fit.

F. LAMORANDIERE."

Mr. Lamorandiere's notes are quoted pretty fully, because they present an interesting little picture of life in Upper Canada about the beginning of last century, illustrating, to some extent, the relation that existed between the traders and the Indians, as well as showing us that the aboriginal custom of confirming a promise with some tangible pledge was yet in force.

We are greatly indebted to Mr. Lamorandiere for his gift of such a well attested "document," and to Mr. Tucker, for his kindly offices in procuring the wampum for the Provincial Museum.

#### BIRD AMULET.

It has more than once been pointed out in our reports that by far the greatest number of the "bird amulets" found in Ontario

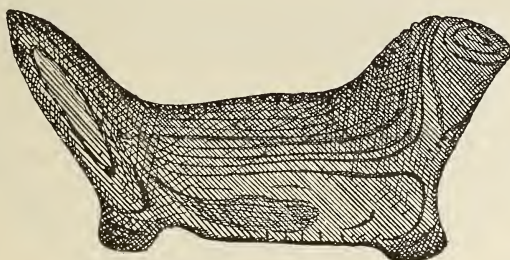


Fig. 74, (27,001) full size.

come from the peninsula lying west and south of a line drawn from Kingston to Goderich or Kincardine. What is the most easterly example is represented by figure 74, (27,001), which has recently come to us from Drummond township, Lanark county, in the valley of the Rideau. The head of this specimen is missing, but in every other respect the "amulet" is complete. It is made of the standard material, Huronian or striped slate, and was probably carried from the west to where it was found. It may do no harm to repeat that no object of this kind has been found in Ontario associated with human remains, all have been taken from the surface, or were exposed by the plough, so that even in the latter event they were lying at no great depth. Since the issue of last report, we have received casts of two very fine specimens picked up in Manvers township, Durham county, forty years ago. For these we are indebted to Mr. J. G. D'Olier, now of Rochester, N.Y.

The specimen figured was found by Dr. T. W. Beeman.

#### COPPER.

The appearance of the copper tool shown here (fig. 75) is strikingly European—perhaps because it reminds one so much of the blade of a spokeshave. It is safe to assume that the tangs were for some sort of handle attachment, and perhaps the implement was used as a currier's blade is, or, like what is known as the woman's knife, or Eskimo knife. This peculiar specimen was found eight feet deep in an excavation made for the Trent Canal, where it crosses the Portage road, in Eldon township, Victoria county. In such cases, however, little or no value can be attached to depths. What was lying on or

near the surface only a minute ago may be found feet, or fathoms below, as the result of a little loosening of the earth where an object

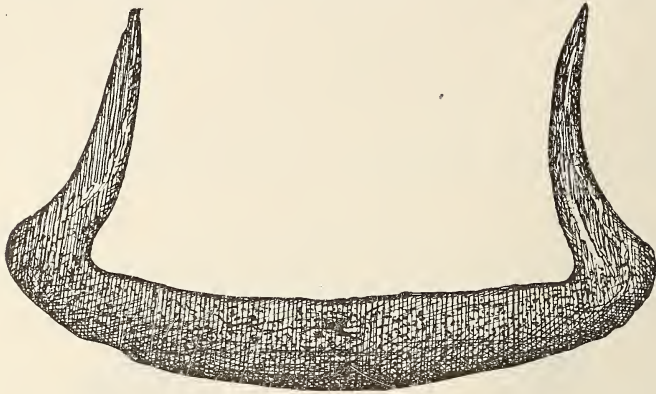


Fig. 75, (18,227) full siz..

lay; but when the finder take this specimen from undisturbed soil, no matter at what depth, the case is very different. In this instance the conditions, if not uncertain, were not mentioned.

The tool is considerably weathered, especially the tang portions, showing the peculiar fibre-ridges so often found on long-exposed, cold-hammered, copper articles.

Figure 75, (18,227), was found by Mr. Alexander Miles, and forms part of the collection presented by Mr. George E. Laidlaw.

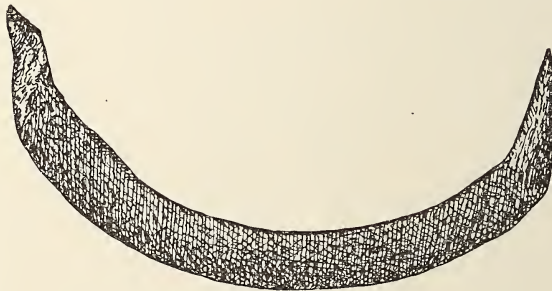


Fig. 76, (3,705) full size.

What one may suppose to be another tool of the same kind is shown by figure 76 (3,705), taken from the bed of the Rideau near Oliver's Ferry at low water, by Dr. T. W. Beeman.

#### POTTERY.

The pieces of pottery here illustrated, figures 77 and 78, (25,439) and (25,457), were taken by Mr. Walter M. Dick from a grave on the Walker farm near Brantford, a locality that has yielded considerable quantities of relics, although hitherto no whole specimens of clay vessels have been found. Both vessels are in the main, of the usual type, differing only in being perfectly plain with the exception of the shallow cremation along the edge of figure 78, and some slight incised markings on 77.



When native-made pottery is present, whether whole or in fragments, on rock ledges or in recesses, in graves or on village sites, it points almost certainly to a time anterior to the Indians' com-



Fig. 77 (25:439) half dia.

munication with white men, because one of the first results of trade contact was the substitution of brass kettles or pots for the poorly burned, more easily broken, and much less portable clay vessels.

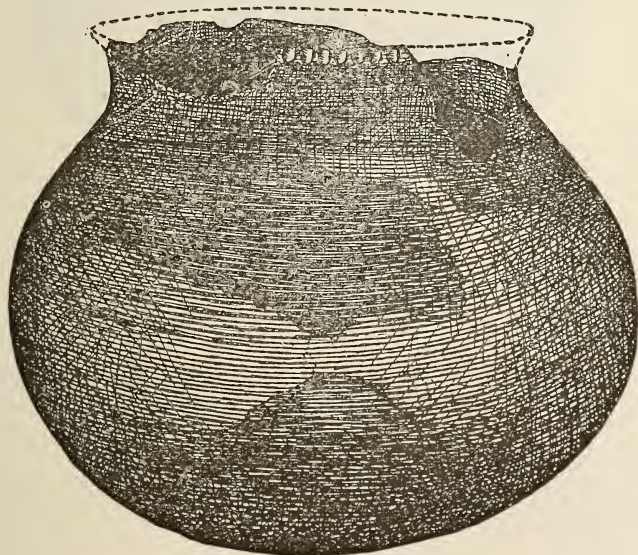


Fig. 78 (25 457) half dia.

It has been possible to remove comparatively few dishes of this kind from graves in anything like a whole state. Even when

it would appear as if most of the fragments of a vessel were lying before one, it is seldom, indeed, that success attends attempts to form a complete pot.

Some of the best specimens in the Provincial Museum were found in cliff recesses, and in an inverted position. It has been thought that they were thus placed as traps for squirrels and other small animals, just as we ourselves sometimes use bowls to catch rats and mice, but it is far more likely that they were left in this way for the sake of stability, and, perhaps, to prevent water from finding its way inside, and thus rendering them liable to certain breakage from frost, for the probability is that clay pots were most frequently so stored, during winter marches.

The comparatively perfect vessel of which figure 77 is a diagram, was the only artificial relic found in a grave four feet deep, and containing nine skeletons. A pine stump eighteen inches in diameter stood on the top of the grave.

This pot is five inches deep, and a little more than six inches in diameter.

Reference to the list of additions to the museum will show that we were presented by Mrs. J. W. Scatcherd, and her sister, the late Mrs. J. W. Wallace, of Flagstaff, Arizona, with a number of clay pots and other objects connected with old-time and recent Indian life in the south-west.

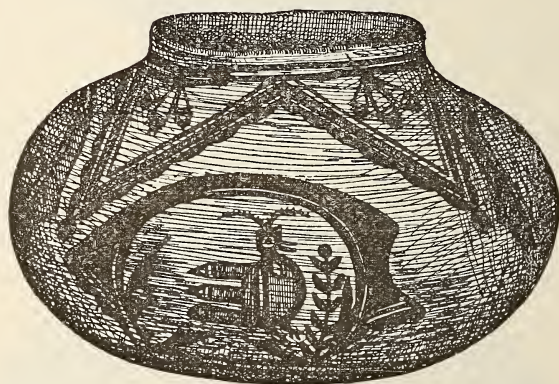


Fig. 79 (26,873) 2-5 dia.

Figure 79, (26,873), shows what one of these looks like. It and another are of Moqui make (recent) and were procured directly from the Indians, by Mrs. Scatcherd. Vessels of this kind burn to a creamy white, or light yellow, and afford excellent ground for the painting of designs in black, various shades of brown, and dingy red.

While the shapes of Arizona and New Mexican earthenware resembled, in many cases, the ancient patterns, the style of decoration has become very much mixed, as may be seen by this illustration.

Here we have what is meant to represent a bird in each of the four panels that occupy the exterior surface of this olla. The absurd, or, by courtesy, the somewhat conventionalized form of the



picture, more especially that portion of it which represents the wings and tail, renders it difficult of recognition, but there can be no doubt as to the decorator's intention.\*

Some of the other pots presented by Mrs. Scatcherd and Mrs. Wallace have been ornamented by more skilful draughtsmen, or draughtswomen, rather, but this example best illustrates the overlapping, or mingling of the new and old in native art.

As the Indians of Arizona and New Mexico find a ready market for all the vessels of this kind they can make, and are thus enabled to add considerably to their comforts, it is to be regretted that efforts like those of Mr. L. O. Armstrong among the Algoma Ojibwas, have not proven more successful, for there can be little doubt that a complete revival of the pottery industry on many of our reserves would prove profitable.

If any further attempts be made to bring about such a result, the Indian women should be instructed to follow closely and honestly all the primitive methods.†

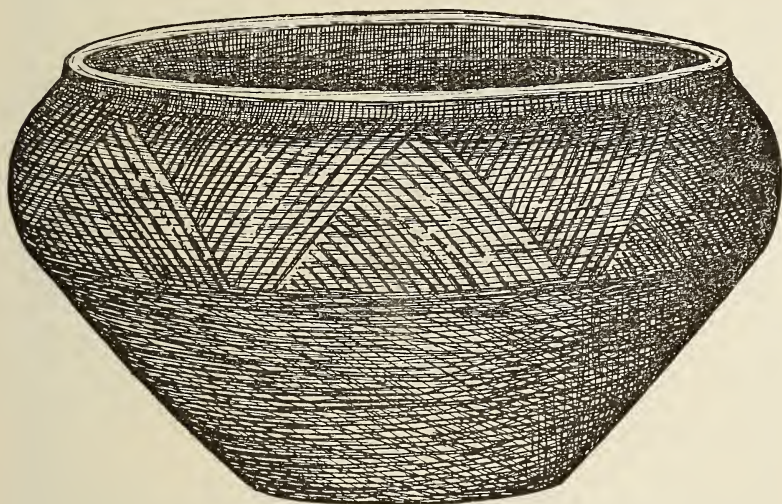


Fig. 80 (3,152) half dia.

\*In the 22nd Annual Report of the Bureau of American Ethnology, part I., just issued, Mr. J. W. Fewkes says at p. 146, in a long and admirable paper on Pueblo pottery: "Figures of birds predominate in the pictography of all the ancient Pueblo ruins which have been studied. In their delineations of bird figures, however, the artists took strange liberties with nature, representing birds unknown to students of ornithology."

Plant forms never appear on the ancient pottery.

†"The aboriginal potter's art was one of the first to fall into disuse after the arrival of Europeans," and we accordingly find few, if any, evidences or attempts to make clay vessels since the Indians became possible possessors, first of copper, and more recently of iron-ware. There is, perhaps, not a single Indian in Canada, and few on the continent, capable of making a clay pot by the strictly old methods. Mr. L. O. Armstrong, Colonization Agent of the Canadian Pacific Railway tried to re-introduce the art among the Ojibwas, on one of the Algoma reserves a few years ago, but the results were not at all encouraging, if we may judge from two specimens that Mr. Armstrong was good enough to place in the museum, even should ample allowance be made for the statement that many other examples were of a much better quality. It is only in certain localities in the south-west of the United States, *c. g.*, reserves in Arizona and New Mexico, that we find the ancient art maintained with any measure of success.



The United States Government has effected numerous tribal deportations of eastern peoples to western reserves, and among one of these settled in Arizona was an old woman (a Cherokee?) who claimed, or was credited with, the ability to produce pottery after the old eastern methods of working.

A gentleman having prevailed upon her to make six specimens for him, to correspond as nearly as possible with Atlantic slope types, presented one of the reproductions to Dr. S. H. Collins, of Lawrenceburg, Ind., and Dr. Collins was generous enough to give it to us; figure 80.

A close examination of this very well made vessel incites a little enquiry.

Perhaps what will first catch the eye is the flat bottom. As far as is known to me no example of eastern states, or of St. Lawrence valley pottery has been found otherwise than round bottomed. Very likely the old woman found it convenient to use a board, or a flat stone on which to mould her clay, but the making of the bottom flat is an evident oversight—one, too, which implies ignorance, or forgetfulness on her part, respecting the advantages possessed by a round bottom over a flat one.

In shape we have nothing to correspond with it in the museum from any part of America. Its resemblance to prehistoric European ware is much closer than to anything commonly found on this continent.

Again, the color is black, inside as well as outside, and the surface takes a fairly good polish. In these respects the piece looks like vessels from Santa Fé and Santa Clara, New Mexico, and the question is brought up whether the maker merely imitated the Santa Fé finish, or reproduced what she knew to be the method of finishing such vessels in the east, for we must bear in mind that usage, lapse of time, and exposure to the elements, or contact with the earth would effectually remove any superficial treatment of this kind, thus accounting for the utter absence of color on such specimens as now fall into our hands in this part of the continent.

It is mainly in the incised design that we can trace eastern relationship, as the pattern is one of the commonest on our pottery, while incised designs of any kind are comparatively rare on Arizonan earthenware.

Without being able to examine a fracture it is impossible to know how the clay was tempered.

The vessel referred to is fully eight inches in diameter, and is four and a half inches deep.

#### PICTURE WRITING.

Between sign language and picture language there seems to be a fairly easy and almost natural step whichever way it may have been taken. It is probable that in the evolution of alphabetical characters, every written language has gone through both stages. Within the present area of Canada and the United States picture writing was the highest condition of development reached by the natives, but even so, the art never attained a very high state.

At best, such a method of expression must always be more or less arbitrary, even when conventionalized forms have become fixed.

We may feel quite sure, for example, that certain lines, or combination of lines indicate rain, water, lightning, buffaloes, and so on, but beyond this we cannot go without direction or instruction from some one who possesses a knowledge of the story either at first hand, as the writer, or, traditionally.

The most highly conventionalized characters in Ontario appear on precipitous rock-faces, and are usually found on lake and river margins. A few samples of such work have been found on bits of much decayed birch-bark, and, so far as known, Ontario has no examples of pictographs on skins, by its "old people." Among prairie tribes, however, this seems to have been a favorite device for recording events of importance, if we may judge from the observations of Catlin, Schoolcraft and other early travellers, but even on their auth-



Fig. 81.

ority we are not quite sure how far back the practice extended. What was seen by the pioneer explorers may not have dated beyond the earliest white-man days, although it is easy to concede the likelihood of long previous use when we know how marvellously adept the plains Indians were in the use of sign language, not by means of limb movements only, but by light-flashes from pieces of mica.

Among the Sioux there were kept "winter counts," or calendars, by means of pictures arranged spirally, on buffalo skins, and sometimes covering periods of from fifty to a hundred years. In accordance with this method, the count was kept by designating each winter as this or that, referring to some important event of the season.

The Blackfoot record on deer skin, of which a good copy is shown at figure 81, seems to be connected with some hostile engagement.



The presence of horses, and of muskets, is enough to show us that the record relates to a date subsequent to the arrival of the white man, while the fact that some of the fighters are armed with bows and arrows points to a comparatively early day in the history of race-contact, a time too early for all the Indians to have secured firearms.

The two horses shown in outline are drawn in pale red; those in white are colored yellow, while the dark ones are partly brown and partly red.

This interesting document was procured on the reserve of the Blackfoots in Alberta, by the late, and eminently venerable, Mrs. Sarah A. Curzon, and came to us through her respected and highly accomplished daughter, Miss Edith M. Curzon, who was drowned, nearly two years ago, in Go-Home Bay.

Neither of these ladies knew the meaning of the story depicted on the deer skin, so that when Miss Curzon was spending her vacation in the Northwest during the summer of 1902, it was arranged that if we would supply her with a photograph of the pictograph she would endeavor to procure its interpretation from some of the Blackfoots, among whom her sister and brother-in-law resided—the latter as Indian agent.

After Miss Curzon reached her destination she wrote the following letter regarding her unsuccessful attempts to unravel the picture-story. Although most of the letter deals with other Indian matters, it is interesting enough, ethnologically, to be given here in full.

GLEICHEN, ALTA, 16th June, 1902.

MY DEAR MR. BOYLE:

I was so rushed in leaving town that I could not see you to thank you for the photograph. My sister and my brother-in-law say there is not much chance of getting the interpretation, because as a rule the pictures are largely the result of imagination rather than for depicting the real history of anyone, or of anything. It is the same in the dances, the men get up and say what they would do under such and such circumstances, and then, finally say they *have done* these things; a state of affairs not unknown among white people of boastful tendencies.

We drove over the prairie a short distance to see a dance given by one of the Indians,—just a common dance.

About ten waggons were drawn into a circle, and at one side a number of old pieces of canvas and blankets and quilts spread up to make a shelter from the sun. At one side within the circle four young men were seated, two and two, on waggon seats beating a skin drum suspended from sticks. They chanted in a loud, quavering, falsetto voice, a monotonous dirge, while the dancers sat on the ground or on waggon seats around the circle. Every now and then, one man would get up and begin dancing, and others followed. The dance consisted in balancing, first on one foot during two beats, then on the other, the dancers sometimes simply standing in one place, others going around in a small space, some perhaps, following, or choosing their own path in the circle. None of the dances lasted longer than three minutes, and some of them only about one. Most of the performers were fantastically dressed, and all were painted. One had nothing on above his waist except paint; some had strings of sleigh bells around their waists and legs, and turkey-feather ornaments were quite popular. One man wore trousers of blue figured blanket: and fastened to his belt, both front and back, a huge disk set around with feathers, which necessitated his sitting on a wagon seat instead of the ground in order to preserve them unbroken. Several of them wore cockatoo-sort of affairs on the heads, which they get from the Crows, a tribe across the border. My brother-in-law has one which he is giving me, to take back. Old Crowfoot's grave is a short distance away from here, and his daughter-in-law does my sister's rough house-work. She is married to one of his sons, who is blind. She says she did not want to marry him at first, but Crowfoot offered her mother a good many horses, etc., and she concluded that some of the other men might be much worse, so she married him. She has a ne'er-do-weel



son, Jack, about twenty, and a pretty little rag-a-muffin, about five years old, called Joe in English, and Akeenam, in Blackfoot. We are within sight of a "dead tent," a tepee built on a hill, over a young man who died a few weeks ago. There has been great mortality among the Indians owing to measles, but it has passed away now.

I am very sorry that I have not a camera with me, as there are many characteristic pictures I could take of their mode of life

With kind regards,

Yours very sincerely,

EDITH M. CURZON.

In connection with the statement that "as a rule the pictures [of this kind] are largely the result of imagination rather than for depicting the history of anything," it may be added that this view is not accepted by the Rev. Dr. John Maclean (now editor of *The Wesleyan, Halifax*) who spent several years as a missionary among the Blackfoots. Dr. Maclean thinks it is yet possible to discover the story told by the pictograph on figure 81.

#### PORCUPINE QUILL WORK.



Fig. 82 (26,988) half dia.

Until within the last few years there is said to have been on Quarry Point, Lake Couchiching, the northern extension of Lake Simcoe, a rock, on which were some Indian paintings. Mr. J. Hugh Hammond, barrister, of Orillia, who takes much interest in all things connected with the Rama Reserve people, of whom he is the trusted adviser, has kindly procured for the museum what purports to be a copy in quill-work of the rock paintings referred to. The work was done by MESAQUAB (Jonathan Yorke), a Mississauga, on the Rama Reserve, which includes Quarry Point, but as he was entirely dependent on his memory, and it is some years since the rock fell into the water, considerable allowance must be made for the accuracy of his performance.

The design is said to represent two Ojibwa warriors after the last great battle fought with the Iroquois, the central figure being a Mohawk, or Canienga. MESAQUAB asserts that the Ojibwas, coming from the north, occupied the territory forsaken by their enemies, and that his band of the Mississaugas chose the site and vicinity of the present town of Orillia—the Huron, Cahiague.

Reverting to the illustration, it may be mentioned that the museum was desirous of procuring a specimen of undyed, quill work, as free as possible from any appearance of European influence, and that MESAQUAB chose this as the design for the lid of a birch-bark box he was asked to make with the above object in view. The box is  $9\frac{1}{2} \times 6 \times 2\frac{3}{4}$  inches.

Perhaps it should be pointed out that the borders of the illustration did not appear on the rock painting.

#### HUSK FALSE FACES.

During the numerous feasts held by the Iroquois Pagans on the Six Nation Reserve, in Brant county, certain dances are performed in which those who take part are disguised by means of false faces, made of corn husks, somewhat ingeniously put together.\*

The mode of making is ingenious. A single coil of three-plait, coarse strands forms the edge of the rim or frame, part of each central, or upper strand of which is frayed to form a fringe all round. Above this is a five or six coil band of much finer plait-work to cover the brow and chin, and back portion of the cheeks. This leaves a space to be filled mainly by the eyes and mouth, with room for the nose. Each eye-piece is formed of five coils of still finer strands, leaving a hole an inch or so in diameter. The mouth-piece is made similarly of twelve five-plait strands, but the coil is worked more conically, terminating in a hole only about three-eighths of an inch in diameter. After the eye and mouth-pieces have been attached, the intervening spaces on the face are filled up with short plaited material of the same kind. The nose is made separately, and con-

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\*"Seven boys in husk masks \* \* \* enter.

"Head man speaks, and while he does so the dancers are performing antics among the people on the floor—shaking rattles and making subdued sounds with their mouths. \* \* \*

"When the Head man ceases to speak the masked boys give the Husking Dance." *Archæological Report, Ontario, 1898, p. 87.*

An old Indian on the reserve informed me during the winter of 1898, that masks of this kind were of much earlier origin, than were those of wood.



sists of a small bunch of husk-leaves tied up in a large leaf, and fastened to its place at three points by strings. The lower fastening is done so as to be out of sight.

The mask, of which a diagram is given here, was worn at many dances during several years, by a leading man among the Senecas.

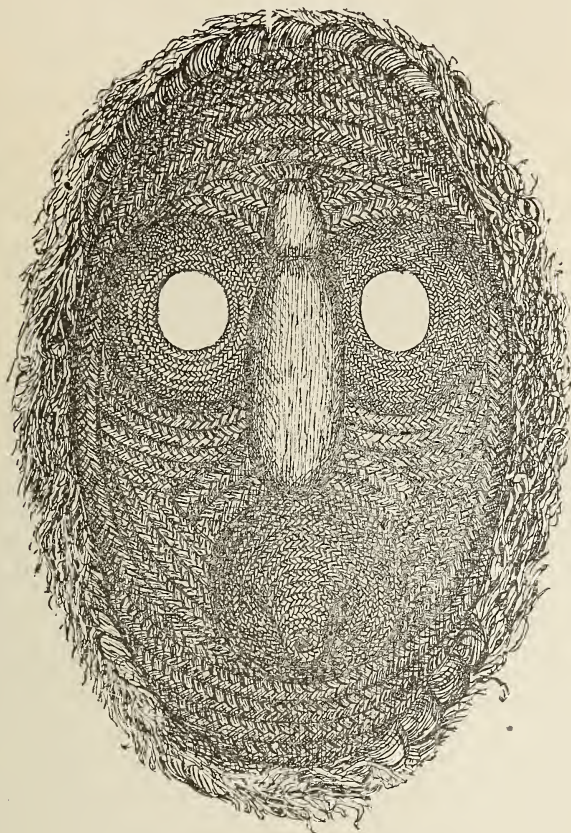


Fig. 83.

Since this was written we have acquired what is, in some respects, a more ingeniously made husk mask, the nose of which is formed by a continuation of the plait-work used to make the eyes.

#### THE WINONA STONE.

In a "new country," such as ours is, the records of two or three hundred years take us into the period of our ancient history, and even the occurrences of last century possess a halo of antiquity. 1776 is an important date in the history of Great Britain as well as of North America—to Canadians scarcely less than to the people of the United States, the events of that time meant nationality. Settlement in Upper Canada, but wholly along the frontier, became active, mainly by the arrival of contingents and individuals from the terri-



tory of the newly organized Government, and among the districts then occupied by the immigrants was the tract forming the western townships on the south shore of Lake Ontario. In the township of Saltfleet the escarpment known as the "mountain" runs almost parallel with the lake, and only some two or three miles from the shore.

On the face of this cliff, and on what is known as the E. D. Smith farm, near Winona, about a mile east of the McNeilly Mountain road, a boy named Charles Cooper in the fall of 1899 came upon the stone of which figure 84, (26,987), is an illustration. The boy was trying to dig out a rabbit, when he found the stone along with a few Indian relics about a foot from the surface. Subsequently



Fig. 84 (26,987.)

this stone carving came into the possession of Mr. Edgar E. Farewell, of Grimsby, who very kindly presented it to the museum.

It is six inches and a half high, seven inches and a half wide along the base, and averages an inch and a half in thickness. The material is limestone, apparently of the variety known as lithographic, and resembles the German rather than the Canadian stone. Even the carved head seemingly has a Teutonic feeling about it, but it is chiefly the nature of the stone that raises a doubt as to the origin of the work. Was it brought, just as found, across the sea? Was only the stone brought, and the carving done here? These and such queries as, who is represented? What did he do in 1776? Why was the stone buried in such a place, and how did it become

associated with the Indian relics? will, in all probability, never be answered.

Of one thing we may be quite sure, the work is not Indian, and perhaps we are also safe in saying that is the oldest-date-bearing stone in the Province, exclusive, perhaps, of a few tombstones.\*

Regarded from this point of view, it may be excusable to find a place in this report for a reference to the Winona stone.

#### MEXICAN MARBLE MASK.

The marble specimen represented here, figure 85, (12,174), from San Juan Teotihuacan, a few miles northwest of the city of Mexico, is almost as rude in conception and execution as is anything we find made by Indians farther north.

Excepting only the simple scroll on the forehead, it is of the schoolboy type.

Its use is unknown. It may have been an architectural ornament, and if so, was probably attached by means of the projections on the sides.

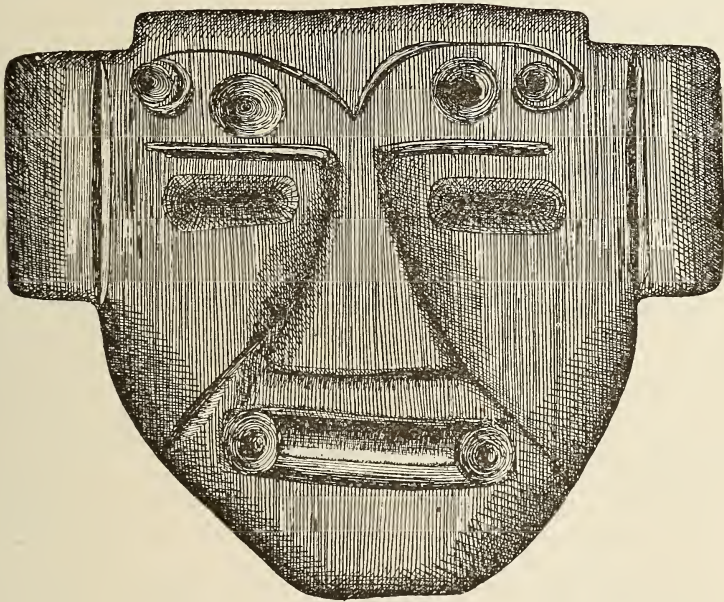


Fig. 85 (12,174)  $\frac{2}{3}$  dia.

In workmanship it is even more primitive than many specimens are that we have found in Ontario, and it is here introduced for the purpose of comparison with these, from which it is distinguished mainly by its larger size, for while our old people seldom attempted anything in stone beyond a pipe-head, the ancient Mexicans frequently handled material of this kind, weighing hundred weights, and even tons, upon which they carved elaborate patterns.

\*In Paper No. 10 of the Niagara Historical Society, "Inscriptions and Graves in the Niagara Peninsula," by Janet Carnochan, there is no record of any date so remote as 1776.



In a sense, there is no carving on figure 85, for all the work is the result of boring and rubbing.

### ONEIDA MOUNDS.

Quite a number of years ago I was informed by Dr. G. A. McCallum, now Superintendent of the London Asylum, that there were certain mounds of considerable size in the township of Oneida, Haldimand county, some five or six miles from the village of Cayuga. More recently other persons have mentioned these mounds, and one of the latest to do so was Mr. A. K. Goodman, LL.B., barrister, of Cayuga.

Having written to Mr. Clark Vanderburg, the owner of the farm on which the mounds exist, this gentleman was good enough to reply that he would "freely give, on behalf of the Ontario Government, permission to excavate and examine the mounds" on his farm. Our experience in 1901 with the Messrs. Bradt, concerning the Yellow Point Mound in Louth township, taught the necessity of caution. Mr. Vanderburg, however, is a gentleman who is only anxious to do all he can towards furthering the interests of archæology, without any reference to "how much there is in it," for himself.

A visit to the Vanderburg farm in June last enabled one to realise why so much had been said with regard to the mounds there, for they occur on low, level land, and form a group of some six or eight, quite close together—closer, indeed, than artificial structures of this kind usually are.

No measurements were made, but, speaking roughly, the mounds are from forty to sixty feet in diameter, and some of them appear to be upwards of ten feet in height. All of them approach the circular form.

To examine even one of these in a thorough way would demand a good deal of time and the expenditure of more money than was warranted just then, but there can be no doubt as to the desirability of opening at least one of these, if for no other purpose than to ascertain the nature of its structure, and thus to settle what has been for more than half a century a cause of wonderment to all who reside in that part of the country, as well to others from a distance.

The educational value of proving either a positive or a negative along the archæological line would lead to an opposite conclusion geologically, and the settlement of such a question is of considerable importance among an intelligent community.

The relation of these mounds to one another and to the surrounding country is such as to make their existence quite as anomalous, or inexplicable from the geological, as from the archæological point of view.

When seen by the writer, several of them were still surrounded by from two, to perhaps four or five feet of water which had remained since spring.

### THE HOUSE OF THE DEVIL.

As long ago as April 21st, 1903, General Clark, of Auburn, N.Y., wrote to me that in the course of his reading he had come across an extremely curious and interesting statement connected with the visit of an "American Gentleman" to Niagara Falls near the close of the eighteenth century.



The traveller in question wrote on May 17th, 1792, an account of his visit for "The American Apollo," Boston, January to September, 1792, p. 321, and this was subsequently quoted in the Historical Magazine, Vol. VII., 2nd series, p. 15.

The following is the quotation as forwarded to me by General Clark:

EXTRACT OF A LETTER FROM AN AMERICAN GENTLEMAN AT NIAGARA, DATED MAY 17, 1792.

"I have seen the celebrated Falls of Niagara. It is situated eighteen miles above Lake Ontario, and as many below Lake Erie. There all the water which the lake and rivers collect for upwards of 1,500 miles falls down a perpendicular descent of 142 feet. Below, for the space of 100 yards, one cannot see the water, by reason of a thick fog which rises and forms a continual cloud; in which, in a clear day, one may see a rainbow morning and evening.

"The cavern which the Mississaugas call *Manito ah Wigwam* or *House of the Devil* is a curiosity of which I never remember to have seen a description. It is situate about eight miles from the west end of Lake Ontario. The mountains which surround the lake at this place break off and form a precipice of 200 feet perpendicular descent, at the bottom of which the cavern begins. The first opening is large enough for three men to walk abreast without interfering. It continues in this manner for seventy yards horizontally, then it falls perpendicular fifty yards of which I gained the bottom by steps of one, two, three, and four feet; then it continues fifty yards horizontally, at the end of which I discovered another perpendicular descent; but as there were no stone steps and the air of the cavern was intensely cold I proceeded no farther.

"The explosions which it sends out about once a week in the spring and autumn shake the ground for 16 miles around to such a degree that the furniture is often jarred from the shelves in the houses."

Concise as this account is, it is yet sufficiently circumstantial to bear the appearance of truthfulness. We have the distance of the cavern from Hamilton; its situation in relation to the escarpment; the size of the entrance; the length of the passages; the connection of these by means of "steps;" and the "American Gentleman's" reasons for proceeding no farther than a hundred and ten yards horizontally, and fifty yards downwards. Besides all this, we are assured that about once a week in the spring and autumn "it sends out explosions that shake the ground for sixteen miles around."

On receipt of General Clark's letter I wrote to Mr. A. B. Foran, postmaster of Winona, a village some ten miles east of Hamilton, and lying between the lake shore and the base of the mountain, asking whether he, as a native of the district, knew about any such place as the cave referred to.

Mr. Foran replied: "that he had never heard of any large cave along the face or foot of the mountain," and that since receiving my letter he had not only made numerous enquiries, but had spent the whole of Queen's birthday in "looking up" the cave, without any success. He mentioned, however, that he had heard of a cavity in the rocks near the "Burning Springs" at Mt. Albion, and that on one occasion the village blacksmith having determined to explore it, struck a match near its entrance, when an explosion took place, blowing him some fifteen or twenty feet down the bank. His beard was burned off, and his face and hands were badly scorched also, as results of his temerity.

This information was so encouraging that I decided to visit the place on the 7th of August last. At Stoney Creek, I was met by Messrs. A. B. Foran, J. H. Smith, Inspector of Public Schools, Ex-

Warden Murray Pettit, and C. W. Harrison, M.A., Head Master of the Grimsby High School. To all these gentlemen, especially to Mr. Foran, my thanks are due for the many courtesies they extended to me during this visit.

From Stoney Creek we drove westwards about three miles until we reached Big Creek, which finds its way lakewards through a deep gorge in the mountain. Under the guidance of Mr. Foran we had anything but an easy walk up the stoney, and almost dry bed of this creek, for what seemed at least two miles, but which was, in reality, only one, when we reached a place where the gully formed a roughly circular space about two hundred feet wide, and not far from nearly half as many high, but we discovered no sign of anything in the shape of a cave, either large or small. Mr. Foran assured us we were not far from it, but as it had been pointed out to him from the top of the cliff, he was not at all sure of his bearings.

The following day we were more successful. Mr. Foran and I drove to Mount Albion post office, where we met Mr. James A. Davis, who, within ten minutes, conducted us to a small triangular opening in the face of the cliff at a great height above the bed of Big Creek, and not more than six or seven feet below the edge of the declivity, although fully fifty feet below the crown of the slope leading to it. This, then, was the cave where the explosion took place that sent the blacksmith rolling down the bank!

The entrance, as already stated, is three-cornered, and not more than three feet high. Without much labor it would be impossible for a man to enter the place, and as far as could be guessed from what was visible, there was no enlargement within. Pushing myself in as far as my shoulders would permit, no gaseous or other smell was perceptible, except that of dampness.

The place is situated on lot 34, concession 6, township of Saltfleet.

We were told that people go from Hamilton to visit the Devil's Cave, as it is called, but what they go "out for to see" is not very evident. Possibly the entrance is now less than it was some years ago when a man named Barrett, a fugitive from justice, is said to have hidden himself here for some weeks.

In any event the place does not correspond to the one described by "An American Gentleman" in 1792, in the very important particular that his cave was at the bottom of a precipice two hundred feet high.

However improbable as is the existence of such an enormous cavity as that so minutely described by the "American Gentleman," it would be rash to deny its possibility, because limestone formations are not infrequently characterised by caverns of considerable extent, and we can easily conceive of the entrance to a place of this kind at the base of an escarpment two hundred feet high, becoming utterly lost to sight, either by a landslide, or by the accumulation of detritus during many years.

In either case there is not much likelihood of its being re-discovered, especially as the neighborhood possesses not even a shred of tradition respecting its existence, and we know that the land has been settled all the way from the mouth of the Niagara to Burlington Bay or "The Head of the Lake" since the year 1776.

It may interest the reader to know what General Clark says respecting widely-spread, Indian, cavern myths:

"The story told of the cave known as the 'Devil's Hole' is of the same class of mythological ideas as are those already referred to. It was the evil spirit or rather the mischievous spirits that made all the bad places such as water-falls, and dangerous points, and the general business of the good spirit was to correct, as far as possible, these evils which generally resulted in the killing of the snake, or evil spirit. In this case, according to the story, the snake was killed on Buffalo Creek, and floated down to the Falls, and so damned the water that the rocks under and behind the monster broke away and caused the Horse Shoe Fall. This legend of the Thunder Beings frequenting the vicinity of waterfalls and of caves in their vicinity has a very wide range. There was very generally a boss thunder-god with three assistants (four in all) with a great number of minor gods called Little Beings, as in the Cherokee myths. At the Falls of St. Anthony on the Mississippi the great spirit lived in a cave twenty or thirty miles away, and, very strange, he was identical with the graveyard frequenter who devoured the bodies of all good Indians either dead or alive. This god was a great snake with four legs and immense horns, described as a monster buffalo, etc. They made offerings because they feared him, and not for love. Now if the analogy holds good, and the Missassaga story is correct, this bad fellow had a permanent residence in the cave (House of the Devil) and occasionally on bright sunny days visited the Falls to show his fine suit of clothes, (the rainbow) or when the good thunder spirit removed to the west, as they all do, (because all thunder storms in this latitude came from the west) he may have had his regular home in this cave. . . . The Dacotahs all connect this great deity with their graveyards, and in the horrid form of having four legs and immense horns. The same idea, or nearly so, appears in the fearful monster seen by Marquette and Joliet, painted on the rocks—in the latter case, the being had eagle's claws, etc., etc.

"If such a cave ever had any existence it should be found and described. It may lead to very interesting results aside from mythology."

### AN OLD DAM ON THE GRAND RIVER.

On the principle that "Prevention is better than cure" it is always to be desired that doubts should be removed and mistakes corrected, if possible, before wrong beliefs become fixed. In Europe many erroneous views are popularly entertained respecting topographical and architectural features, the origins of which were for a long time unknown, and even on this continent, young, in a sense, as it is, we are not without examples of a like kind.

Shortly after the identification of the Otonabee Serpent Mound numerous letters were received at the Provincial Museum, the writers expressing themselves with more or less certainty as to the existence of similar earthworks elsewhere. Several of the most likely localities thus referred to were examined, but in no instance was the claim of artificiality sustained.\* It can hardly be doubted that had not

\*For particulars connected with these examinations see *Archæological Report* for 1896-7.



the facts been ascertained, connected with the structure of those so-called "serpent mounds" some, if not all, of the ridges in question would have acquired a false reputation.

For some years Mr. John Jefferson, of Paris, Ont., has known that on his farm, lot 10, concession 1, Brantford township, there exists a somewhat unusual combination of sticks and logs, close to the channel of the Grand River, on its right bank. Mr. Jefferson having made several examinations without in any way disturbing the order, or destroying the appearance of the arrangement, discovered that about two feet below the ordinary high water mark there are logs laid in line with the edge of the river bank, and that these form a backing, or support, for a row of stakes, of which only the ends may now be seen on a level with the surface of the ground, Mr. Jefferson gives the total length of this work as two hundred and eighty feet.

Naturally enough, one is apt to conclude that every rudely put-together, or ruinous and aged-looking structure having no known European or white man's origin must be indebted to the Indian for its existence, and there can scarcely be a doubt that but for this gentleman's intelligent caution the peculiar timber arrangement would, in course of time, be regarded as a piece of native handiwork. Indeed, it is already spoken of in Paris as "the old longhouse," if one may judge from a remark made respecting it by a resident of the town.\*

On the 25th of April I accompanied Mr. Jefferson and his son Mr. Leonard Jefferson to the ground, where it was only necessary to do a little digging to produce evidence for a verdict of "not guilty," as far as the Indian was concerned.

The first remaining piece of one of the uprights that we removed proved to be the end of a pine slab, and the second turned out to be "another of the same". These pieces were about eighteen inches long, squarely cut across on the lower end, and must have been taken from a log, or logs, not less than two and a half feet in diameter. On former occasions when similar examinations were made, nothing of this kind had been found. But although the presence of the pine slabs was sufficient to dispel every notion respecting any possible, or rather, any probable connection of the work with Indian economy, we discussed with some interest how to account for the wooden wall.

A somewhat careful examination of the ground surface showed the water extending about two hundred feet back from a decided depression, the width of which corresponds to the length of the river-side row of stakes, and the inference was drawn that in some way these conditions were connected.

Without more data than we had upon which to form an opinion, we could only surmise along the most likely lines, and what struck us as having the greatest appearance of feasibility was that the wooden structure had been erected as a barrier to separate the waters of the river from those of a pond that occupied the hollow, which pond may have been used for holding saw-logs at an early date in the history of the district—perhaps even as early as one of the French mission periods when, scanty as the supply may have been, sawn

\*The Indians constructed no kind of permanent dwelling near streams navigable for canoes, and for this they had excellent reasons—reasons, too, that will readily occur to any intelligent reader.

material was required for building purposes, in accordance with European notions of comfort and convenience. Mission stations were not complete without a smith and a carpenter, but not seldom the missionaries themselves were qualified to act in one or in both capacities.

At any rate, the pine slabs were proof that either on this spot or at no great distance up stream the grating and rasping of the old pit saw, worked by the top and bottom sawyers, had broken the silence of the seventeenth century forest on the banks of the Ootinawatawa.\*

In confirmation of the supposition that the wooden breastwork served in a small way to form a dam, Mr. Jefferson pointed to lumps of blue clay that were adherent in patches on the face of the work, as if for the purpose of puddling the joints, and this clay, he said, had, no, doubt, been brought from a deposit that exists up the river.

It has been suggested that the pond formed here was meant for saw-logs, but there is nothing to evidence such intention. On the other hand, the structure may have been made to prevent the river from cutting a channel for itself across the bottom-land traversed by the depression already mentioned, and thus eventually carrying away some acres of good land farther down, or, the purpose may have been to form a fish-trap, or fish-pond.

But while there exists a doubt respecting the object of the work, and not a particle of information as to the workers, or when they worked, of one thing we may be quite certain, namely, that it is not an example of primitive man's engineering.

## VILLAGE SITES AND OCCUPATIONS.

When visiting various places that are known throughout the province as having been Indian resorts, or places of abode, it is sometimes not easy to see why they were thus chosen. In other cases one has no difficulty in perceiving why the choice was made, and it is noticeable that not a few of our chief centres of population have grown up round the sites of Indian villages. While it is true that none of the old spots were permanently occupied any longer than the natives with even their simple notions of comfort and cleanliness, thought desirable, removals were never made to any great distance, and not infrequently the same ground was occupied several times, either by descendants of the same people or by people of other tribes. Indeed, it is to a large extent on account of the latter condition that we have so much difficulty in classifying "finds" on village sites when these have been disturbed by the plough, and even sometimes when careful spade work has come first. But although there would, undoubtedly, be a certain amount of satisfaction in being able to determine a first, or any subsequent deposit of material, where village sites and kitchen middens are concerned, it would be impossible to gain very much, if anything, from such knowledge, because, in a general way, all the natives, whether Huron-Iroquoian or Algonkian,

\*Parties of Frenchmen headed by Joliet and Brehaut de Galinée were in this neighborhood during the last week of September, 1669, and Galinée must have passed the place referred to on the Jefferson farm early in October.

See pp. 45-49, Ontario Historical Society Papers and Records, Vol. IV containing a translation of Galinée's Journal, by James H. Coyne, B. A.

were a good deal alike in every way. Of one thing only can we ever feel quite sure, and it is when we meet with objects of iron, brass or glass, for then we know we are dealing with a time subsequent to the Discovery, and contrariwise, we may feel tolerably certain that when we meet with nothing of European origin we are dealing with a pre-discovery condition.

It is nearly always disappointing to find evidence of the white man, even should the unearthed objects, when there are any, prove either numerous or varied.

We may feel assured that there was invariably some locality reason for the selection of a village site, and it should be the duty of the archæological student to determine, if possible, what that reason was. The ground chosen was usually dry, and in most cases high. It was never quite close to a lake, or navigable river shore, and was sometimes from half a mile to a mile away. A supply of water for drinking was not of as much account to the Indian as was a means of defence, but when streams were not canoeable we find the camp grounds close to the water, yet, if possible, on high ground.

In some of these at a distance of several miles from navigable water much time has been given to the making of pottery, bone awls or needles, and probably of articles in wood, all traces of the last having long since disappeared, and we must conclude either that the people retired to a secluded place to carry on this work undisturbedly, or that such places were chosen by those who made a specialty of this or that product.

Exception may be taken to the use of the word specialty in this connection, and yet we are not without reason for believing that among the numerous village sites that dot many sections of the province there were here and there, if not little Montreals and Torontos, not a few little Galts and Brantfords.

About six or seven miles north of Lake Ontario, on Yonge street, a special industry was bone-working—bone awls and bone beads have been collected in considerable quantities; while only about ten miles to the northwest, in Vaughan, the people appear to have devoted their attention to making clay pots.

Again, in the country of the Hurons we meet with many tobacco pipes, while in Middlesex and neighboring western counties there is a multiplicity of plain celts. In the Rideau valley gouges prevail, and along the Erie shore in Welland we find chert arrow-heads in various stages of making, all of which goes to show that the people of various localities devoted themselves in large measure to particular kinds of work, and that in all probability they exchanged their products for those of different sorts made by other peoples; and the inference is fair, namely, that they who had the best supply of any particular kind of raw material used it in the most suggestive way, and that thus they naturally became expert in the making of certain articles.

Here, then, we have examples of the simple beginnings of commerce.

On the authority of the Jesuit Relations we know that the tobacco trade was largely monopolised by the Tionnontates, or Petuns, and on a still larger scale we possess the most tangible kind of proof



respecting the trade that existed between the Huron-Iroquois of Canada and the natives of what are now the gulf states.

Mr. Clarence B. Moore's explorations in Florida have brought to light numerous examples of tools and ornaments made from native copper, the principal sources of which are on the north and south shores of Lake Superior; while in the graves of the Hurons, as well as in those of the Eries, are found large shells from the Gulf of Mexico coast—the inference is plain.

Occasionally we find bone and stone tools suggestive of Eskimo origin, and a few catlinite pipes have turned up in situations that indicate long-ago "trade relations" between our own natives and those of the Great Northwest.

### ANTHROPOLOGY AT THE WORLD'S FAIR, ST. LOUIS.

With the consent of the Minister of Education I accepted an invitation to attend the International Congress of Arts and Science held in St. Louis September 19th to 25th. At the meetings of the various sections there were representatives from several European countries, but the majority of those in attendance belonged to the United States.

Of the meetings that were held by the anthropological section there is really little or nothing to be said, but the case was very different in connection with the arrangements made for the practical illustrations of manners, and mode of living on the part of American aborigines from Canada to Patagonia. The variety of dwellings was, in itself, a study. These were of skin, cloth, clay and wood, and the "architecture" of one was composite enough to include samples of all of these materials. In size, shape and style of accommodation the domiciles differed quite as much. Some were scarcely big enough for half a dozen inmates to huddle, while others were sufficiently commodious to afford dancing-room for a hundred. The very best habitation, evidencing not only mechanical skill, but artistic taste, and tolerably high notions of comfort, was that erected by our British Columbian Indians, built as it was of heavy hand-hewn pine planks, placed upright, covered with a gable roof, and entered by means of a well made door swung on ingeniously constructed wooden hinges.

By far the largest area devoted to this immense ethnological exhibit was occupied by the Phillipinos, whose bamboo houses were built over the water round the shore, the approach to each dwelling being along a short gangway also formed of bamboo. In large buildings were exhibited specimens of everything, one would suppose, that finds a place in Philippine economy.

Under the guidance of Dr. G. A. Dorsay of the Field Columbian Museum, Chicago, we had entry to all the buildings of every kind. In many of the larger domiciliary structures Dr. Dorsay had made arrangements for the performance of dances by the natives for the benefit of the visitors. The most interesting of these were given

\*Just as this goes to press, June, 1905, a letter from Mr. C. B. Moore, who has recently returned to Philadelphia after his winter's work in the south, informs me that he found in Alabama "a copper fish-hook, unbarbed, but grooved for a line," and that he "believes this to be the first ever found in the south."

in a very large circularly constructed prairie lodge or tepee, and in the British Columbian house.

It is needless to say that all the dances bore a religious or superstitious significance. Many of them consisted of simple foot motions in addition to walking-steps as the dancers moved about in a circle, while others were made up mainly of body motions, neither graceful in themselves nor edifying to the onlookers. Of the latter kind there were the dances of the African pygmies, who certainly did their parts with great good-nature, and more than a little vivacity.

By common consent our own Pacific coast natives surpassed all others in their performances, being more diversified, more picturesque, more imaginative, and in every way more dramatic, showing, therefore, a considerably higher condition of mind than that not only of other coast tribes, but of the prairie Indians.

Archæologically, the exhibits as a whole were a failure. In the "Anthropological" building proper, where material of an archæological description was supposed to be in evidence, the only exhibit worthy of more than a casual examination was that of Ohio, under the direct supervision of Mr. W. C. Mills, the state curator. The neighborhood of this state to Ontario, and the fact that its northern portion was inhabited by the Cats or Eries of Huron-Iroquoian stock, must always tend to make an Ohio collection peculiarly interesting to us, and the arrangement made by Mr. Mills was all it ought to be for the purpose of study.

Dr. W. J. McGee, of Washington, was the official in charge of the Anthropological Department of the Exposition, and to him much credit is due for the excellent opportunities his department offered. The knowledge, time, and attention devoted by him to the work were well exemplified, but no doubt it was "a labor of love."

It is much to be regretted that at all meetings such as were those held under the auspices of the International Congress, most of the time is occupied in the reading of papers, and not seldom in foreign languages—languages unintelligible to four-fifths of the audience which must sit and sit hour after hour, longing for a release from so much misery. Besides the very few who are polyglotted, there are always a few more who pretend they know "every word of it," but even to both of these classes as well as to the great majority it must prove a "weariness to the flesh" besides a positive loss of time to sit perforce so long while what are often inane papers are being badly read, or papers the contents of which even if worth perusal at all, might be much more profitably read at other times, in the form of translations.

It would seem improper for any one to inflict a paper in his own language on an audience, only a few members of which can understand him, however agreeable it may be to him to hear himself talk, and it is perhaps equally wrong to occupy time in this way even when all present may be able to follow him, unless he has something to say requiring explanation by means of diagrams, or specimens.

Perhaps another exceptional case would be that of one who wishes to announce a discovery, or some new development.

## AN EXAMPLE OF PRIMITIVE PERSISTENCE.

In one of the Phillipine buildings at the World's Fair in St. Louis there were exhibited the tools and appliances of a native blacksmith shop. Among these it was noticeable that hammer-heads were attached to handles by the primitive method illustrated by figure 86, almost exactly as stone axes are yet handled in the New Hebrides, and as it is probable many, if not all, of our ungrooved North

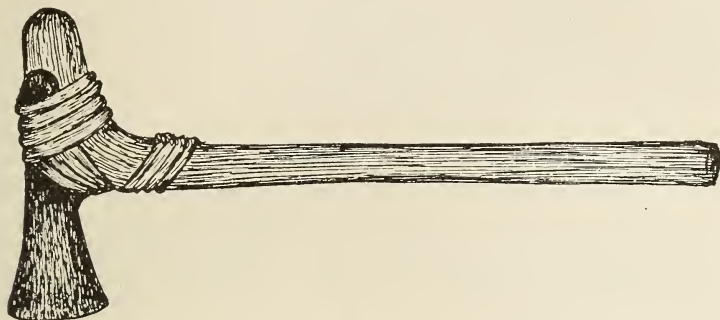


Fig. 86.

American axes and hammers were also treated. The hammer-head of iron, or of steel, is made round in cross section, but with a slight taper towards the poll. The handle is made from a wooden knee, the face of which is hollowed to form a seat for the upper half of the iron head, and the two are bound together as shown in the figure.

It is not easy to say just why this method of attachment has been retained, but there can be no doubt as to its origin. At any rate, it illustrates somewhat curiously the persistence of a neolithic fashion, and its projection into the metallic age. It would be interesting to know whether the ancient method has been kept up owing to the difficulty of punching a hole in the head, or because when the handle is fastened in this way the workman's hand is less jarred than it is when the handle is wedged tightly into a hole.

## THE OJIBWAS OF LAKES HURON AND SIMCOE.

BY J. HUGH HAMMOND.

This people came from the north shore of Lake Superior about the time of the expulsion of the Hurons by the Iroquois in or about the years 1648 to 1660, and after a long series of fights drove out the Iroquois and possessed the lands lately held by their enemies. The territory occupied by the Ojibwas may be shortly described as the tract of land stretching from Collins' Inlet on the northeastern shore of the Georgian Bay, to the eastern limits of the lands claimed by the Mississaugas, thence south to include various reserves widely separated, but mostly in Western Ontario.

The last great struggle between the Iroquois and the Ojibwas occurred near the present site of the town of Orillia, by the complete extinction of the Iroquois bands then occupying this territory. The



traditions of the Ojibwas describe the final battle and the incidents in connection therewith, one of which was the impalement of the Mohawk Chief's wife by the victorious Ojibwas. On Quarry Point, township of Rama, there was a rock having painted thereon some of the incidents in connection with this last contest for supremacy. This rock has now fallen into the water, and possibly ere this the painting has been washed away by the action of water and ice.

The Ojibwas were divided as was the custom among the aborigines into different tribes and clans or totems named respectively, the reindeer, the catfish, the otter, the pike and the snake, and each totem had its head chief who represented his people in the councils of the nation. These assembled from time to time in their long-house at Orillia to settle the affairs of the nation in peace as well as in war.

The territory in which the Ojibwas settled was rich in furs and furnished them liberally with the means to trade with the whites. The otter, beaver, mink, and small fur-bearing animals were numerous, and the moose, the red deer and wolves and bears ranged in countless numbers through the woods. In the waters of the lakes and rivers fish of many kinds abounded, so that there was no lack of the necessary provender in the winter season.

These people are not of an agricultural turn, but rather given to hunting and fishing, hence it will be found that they are not a tall people, being on the average but five feet six, or seven, inches in height, while the body and arms of the individual are well developed. They are all keen canoeists and hunters, and make the best of guides, being faithful and painstaking to a degree. Numbers of the younger men work on the rivers and in the saw-mills during the milling season, but they lack the perseverance of the white in this occupation. Take them, however, at their own work of canoeing, or on the portage, they easily outdo the most hardy white. Though each head of a family has a small land-holding, on the reserve, it is only partially cleared, and but a very small part of it is cultivated, because the men are away during most of the summer season employed as guides by tourists and others.

A large portion of the lands originally owned and occupied by these people has been bought by the Government, the first record we have is in the year 1795 when for the sum of one hundred pounds they sold to the Government of the old Province of Canada 28,000 acres. In 1815 a further tract of 250,000 acres was sold by them to the Government for the sum of four thousand pounds. In 1818 they surrendered 1,542,000 acres for a perpetual annuity of twelve hundred pounds payable to them and their children. In 1836 Sir John Colborne obtained an agreement from them to surrender the lands on both sides of the portage road stretching from Orillia town to Coldwater, on which they were located six years previously by him. There is still a tract of land stretching from Moose Deer Point on the Georgian Bay south to a line drawn through Mitchell Square in the township of Oro, in the county of Simcoe, which has never been ceded by the Ojibwas, and they are now pressing on the Government of the Dominion of Canada for the payment of this territory in the shape of increased annuity. They at present own and occupy the reserve in the township of Rama, consisting of 1,600 acres, Snake and Machego islands in Lake Simcoe, and the smaller islands in Lake

Couchiching, together with the Christian Islands in the Georgian Bay.

This tribe is divided into three bands called the Rama, Snake Island and Beausoliel Island bands from their location; and some time since the Government introduced the system of electing their chiefs and councils. This has not been an unmixed success, as a large portion of the Ojibwas still look to the old chieftains as their legitimate rulers. Of the latter class are Yellowhead, Assance, and Snake, or, to give them their Indian names, Misqukey, Big Bear, and Kinabicoanini. The elective chiefs are Benson, Big Canoe, and Monague. On each reserve there is a resident missionary and mission school, though the children do not take kindly to the white man's ways, yet some progress has been made.\*

Each reserve has an agent who looks after the welfare of the band, pays annuities, and generally supervises the conduct of the Indians. They are largely christian, though there are still some of the families who are pagan in practice, if not in profession. The population of the reserve is decreasing owing to the ravages of disease, especially of consumption, to which the conditions of life makes them susceptible.

These people possess many traditions as to the progress of their "nation" from the Great water to the West till they arrived at their present resting place. They also have the tradition of the Great White God, Wahbe, Manedoo, and the great White Bear, Wahbe-maquut. Outside of these which are generally known to all of the older members of the tribe they have none showing their origin. There are not many of this nation left of pure blood.

In the different treaties the spelling of their tribal name varies—some have Chipawa, others Chippewa, again it is Chippawas, and Ojibway. Doubtless, the writers of the different treaties spelt the name as it caught their ears.

The writer has had the privilege of attending a general council of this tribe, and the addresses delivered were apparently of a high order, and generally appreciated by the assembly. The sound of the voices was almost musical, the gestures emphatic, and the applause was manifested by the ejaculation "Hay-hay-onesheshshin." Freely translated this would be: "Hear, Hear, it is good."

The bane of this people has been hitherto the whiskey supplied by the white race. For this the Indian would part with his most treasured possessions, and thus like most aboriginal races, he became a slave to the drink-habit. Latterly, however, the law has been more strictly enforced, and a large body of the Indians are total abstainers, though there are still some who love the "ishkoota waboo" (fire-water).

They are not now, and perhaps never will be, an agricultural people, owing to their hereditary proclivities which make them wanderers, hunters, trappers and fishermen.

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\*Whatever may be the case on the Beausoliel and Snake Island Reserves, it may very easily be understood why "the children do not take kindly to the white man's ways," as they have these "ways" exemplified by the irascible old man in charge of the Rama school, and if the children make "some progress" in this school they deserve infinite credit. The teacher is truly an "active volcano," and the treatment he metes out to the poor little Indians, would not be tolerated among white children for more than one day.—D. B.

## CAHIAGUE.

BY J. HUGH HAMMOND.

Mr. Hunter, in his notes on the Huron villages in Oro township, county of Simcoe, says: "the best evidence, therefore, seems to point to the Buchanan site, etc." There is another site that should have been taken into consideration before final judgment was pronounced, namely, the Mount Slaven site near Orillia town. I presume that a fair discussion and comparison of the two sites would perhaps aid in fixing definitely the position of the Huron town, Cahiaque.

Referring to the written history of this place we are told in Parkman, quoting Champlain's Journal that the town of Cahiaque was the metropolis of the Hurons, and contained in the neighborhood of two hundred cabins, that it was on the frontier of the Huron country, and that he (Champlain) arrived at this place on the 17th of August, 1615, stayed here until the 8th of September, and then proceeded to the Narrows to supply themselves with fish before starting on the raid; that this place (Cahiaque) was situated three leagues west of the river Severn, in the now township of Orillia; that he (Champlain) returned to this place after the raid, and wintered here, visiting the Neutral Nation to the south, with the Friar Le Caron before starting on his return journey to Quebec; that in the spring of 1616 he was well on his way home when at the lake of the Nipissings he was overtaken by a messenger and had to return to Cahiaque, to the great council house there, to settle an emeute between the Algonkins and the Hurons who had, prior to his coming, had a battle at this place over the death of an Iroquois prisoner that the Algonkins had adopted, and the Hurons had slain. A peace was concluded, and he (Champlain) departed, never to return. In the Jesuit Relations, 1648, chap. 4, Ragueneau says the Arendarronnons abandoned their frontier villages and fell back on the more populous places as a support in the year 1647. Martin, in his life of Jogues (appendix) identifies Cahiaque with Contarea, this place being described by Brebeuf as lying on the frontier of the Hurons.

The only map in existence that describes the location of the Jesuit missions to the Hurons at this time is the Ducreux map published at Paris in the year 1660, which shews the missions as they were in the year 1640, and by this map St. Jean Baptiste Mission is placed on the frontier of the Huron nation, on the southwest side of a lake having a river running north out of the lake into the Georgian Bay, or, as described in another place, the lake of the Hurons, this lake is shown on the Sanson map published in Paris in 1656, and is called Lake Oentaron, and can be easily identified as Lake Simcoe, while Bass Lake does not appear on either of these maps at all. The above is all of the written or pictured history that we have to refer to, and, save the remains of these people, nothing is left.

Let us compare the natural features first of these two sites, viz., Buchanan's and Mount. Slaven: Buchanan's is situated on the west half of lot 7, con. 13, Oro township, Mount Slaven on lot 8, in the 4th concession, South Orillia township; the distance of the Buchanan site from the Narrows of Lake Simcoe (the source of the food supply of the Hurons) is, say, five to six miles, Mount Slaven a scant



two miles; Buchanan's is distant from the Severn River about 16 to 17 miles, Mount Slaven about 12 miles. Now let us take the size of the two sites. Buchanan's is about seven or eight acres, Mount Slaven sixty to seventy acres. Again, let us compare the positions of the two sites as regards nearness to the known trails, the highways of these people. Mount Slaven is directly on the Coldwater and Muskoka trails, while Buchanan's is distant from both of these at least six miles. Take the canoe route or summer connection with the system of lakes, Mount Slaven had direct communication by a running stream, and Lake Couchiching, while Buchanan's was distant five miles from water that would lead to Lake Simcoe, or, as described on the Sanson map, Lake Oentaron. Take again the water supply, Buchanan's is by a small pond of stagnant water, Mount Slaven by living springs, and a running stream right on the camp site.

Let us compare the remains of these people, which, to an unbiased mind, must be the true and final test of the population of a locality. Buchanan's has few, if any, graves of this people, while Mount Slaven has an extensive burial ground. Take the ash heaps, pottery and pipes, we find that Buchanan's has few remains; Mount Slaven had an immense quantity. Again, if we take the axes and utensils of stone and iron, Buchanan's has few, if any, while at the other site in question the finds of both kinds are very plentiful, arrow heads and wampum are equally abundant at the Mount Slaven site, and so on through the whole of the known remains of this people, be they Arendaronnons or Algonkins.

Again, let us study the surrounding villages—I refer to the ancient Huron or Algonkin remains—Buchanan's is not a centre of population, while Mount Slaven is surrounded by villages on every side, viz., the Silver Creek sites to the northwest and north, Smith's Bay site and the Narrows on the east, the Cuppage-Day site to the southeast, and the Harvie, Coleman, Bass Lake and Rowe sites to the south and west, all within a radius of three miles from Mount Slaven, and the trails on top of the shore line directly in touch with this site.

It is claimed that the Mount Slaven site is not in a position where a defence could be made against an enemy, while Buchanan's is. It is well known that the palisading used by these aborigines was made of wood, and since the removal of these people some 250 years has elapsed, which would, in the ordinary course of events, rot away any trace of this work if such had been erected. I submit that if palisading were necessary it would be at the outlying villages, not at the centre of population whence aid would be given to the village attacked by the enemy.

What better defence could be asked for than a ring of villages a direct connection with all of the known trails, and a direct way of retreat by either land or water.

Giving these aborigines a fair share of the sense that we claim for ourselves, would it not be reasonable to suppose that they (1) would be attracted to the Mount Slaven site by the ease of communicating with one another by way of the trails, (2) the proximity of the food supply at the Narrows during the winter season, (3) the permanent water supply for domestic purposes, (4) the sheltered and at the same time easily defended position of the Mount Slaven site if de-

fence were necessary, Mount Slaven being surrounded by ridges on the south and west, and by the lakes on the north and east, (5) the ease of escape by land or water, and (6) the facility of communicating with their kindred in the adjoining district over the Coldwater or Muskoka trails. If the above facts and inferences are true, and they are easily provable, there can be only one conclusion arrived at, namely, that the Buchanan site was, with the other villages, simply a border village adhering to the metropolis in the centre, as was the McPhie, the Annis, the Smith's Bay, the Cuppage-Day, the Coleman, the Bass Lake and the Silver Creek sites.

### THE COMING OF THE OJIBWAS.

An Ojibwa tradition of the coming of the Indian races into Ontario and the antagonism of the various races for each other as given by "Wendausum" (Lightning) and "Mesaquab" (getting into the land). "Shashwup-Kawin, was the name of the two nations of our people in Canada, that is the Ojibwas and the Mohawks. The Ojibwa chief, the great chief was called; Wabhemanidoo, the White God, and the Mohawk chief was called Wabhemaquut (The White Bear), they were friends, until Wabhemaquut came to Wabhemanidoo to get his daughter for his son, Wabhemanidoo's son went to Wabhemaquut's daughter. After this Wabhemaquut killed Wabhemanidoo's son at a great feast given by Wabhemaquut to which Wabhemanidoo had been invited. The Ojibwa Chief Wabhemanidoo went to the feast, and Wabhemaquut had a big maple dish at this feast, and Wabhemanidoo's son's head was put in the dish, and Wabhemanidoo was asked to eat his son's head, so Wabhemanidoo sat down and ate his son's head, and the feast was over. Wabhemanidoo went home. Not long after this Wabhemanidoo had a great feast, and slew Wabhemaquut's son. Wabhemanidoo invited Wabhemaquut to come to his feast, and Wabhemanidoo had a big dish, and put the head in it and handed it to Wabhemaquut to eat, so Wabhemaquut would not eat it. He was sorry, and cried, and said, Oh, my son's head; I will not eat it. Wabhemanidoo said you are not a man when you handed me my son's head, I was a man and I ate it, you have got to eat it. Wabhemaquut would not eat it, and said he would not. Wabhemanidoo got his war club and killed Wabhemaquut by striking him on the head; this was the beginning of the war between the two friends.

There was fighting at different places, and lake George was one of the battle grounds where the Mohawk village was. All of the Mohawks were killed here. The Ojibwa's head warrior was killed also. He was Wabhemanidoo's chief warrior. There was a Mohawk village between Penetanguishene and Orillia; these were all killed at this time. There was also a village of Mohawks at Atherley, and when the chief of the Mohawks saw Wabhemanidoo's chief warrior coming he went and met him, and made a feast with him. The end of the peace talk was that the Mohawks would carry water for the Chippewas when it was wanted, or become their slaves, so Wabhemanidoo's chief warrior forgave him.

There was another village of Mohawks at Skigawog or Pigeon Lake, these were all killed at the same time.

There was also a village of Mohawks at or near Kingston, on the lake, these were killed, too.

There is a rock at Quarry Point, now in the water, on which in an Indian picture all of this is written.

The bank at Lake George is where the fort of the Mohawks was and the village was close to it.

From this time on the Chippewas and Mohawks were enemies. There was another big battle on Manitoulin Island between Ojibwas and Mohawks; you will find some of the skulls there.

Inside of the wall at Lake George there is a lot of the bones of the dead Mohawks, and in the lake, too.

We don't know where our people come from, the only thing we know is four families were out in the water in a big canoe, and were lost in the fog, and were out of sight of land for a long time, maybe a week, then they strike the land in the wild bush, and hunt for a living.

Four or five families camp on a great rock by the water, and the rock moved out in the water for a long time, and after a while come to land in a strange place, they then had to hunt for a living. The rock was a big turtle."

#### NORTH AND SOUTH ORILLIA.

By J. HUGH HAMMOND.

[During the summer of 1904, in company with Mr. J. Hugh Hammond, barrister of Orillia, I had an excellent opportunity to examine a large number of village sites, camping grounds and trails in the township of North Orillia, respecting which so much has been written by my friend Mr. A. F. Hunter. Every reader of the Canadian Jesuit Revelations, and of Parkman's historical works must know how very closely the district in question was associated with the French occupation of Canada, and the papers that have frequently appeared in our reports cannot have failed to impress readers with some idea of the great value attaching to this part of the Province as an archaeological field.

Mr. Hammond has for some years devoted his spare time to this territory, and has thus been able to add very much to our knowledge respecting its centres of population and its "highways." Necessarily, he has in some cases, overlapped ground already covered by Mr. Hunter, but he has also traversed many new, and therefore wholly unexamined tracts, with happy results. Following this is a paper in which Mr. Hammond tells his own story.

When going through these townships I was fortunate in meeting a number of people possessing Indian relics of various kinds, and who were good enough to present them to the Provincial Museum. This opportunity may therefore be taken to acknowledge the generosity of Mr. George A. Greer, Mr. Archibald Fyfe, Mr. John Ego, Mr. J. Stewart Nelson, Mr. and Mrs. Robert Anderson, and Mr. John H. Willey. A few good specimens were also procured by purchase from farm boys.]—D. B.

The following is an attempt to add to the history some more information regarding the sites of the Huron and Algonkin villages in this centre of population prior to the final raid of the Iroquois in the year 1649.

I propose to take the reader over the sites already found, and, where necessary, to add a further quota of information obtained during a summer spent in steadily going over the ground verifying every fact and, in many instances, visiting the same site repeatedly until the whole of the subject so far as limited time and opportunity would allow has been exhausted. Where the writer differs from that al-



ready written of this township by Mr. Hunter it is not in a carping or argumentative spirit, but simply that the whole subject may be thoroughly discussed, and, possibly, light obtained regarding these extinct peoples who lived, flourished and died before the white man put in an appearance in Canada, or, rather, our own Province of Ontario.

It will be well to avoid confusion to follow the numbering already used by the writer referred to above, Mr. Hunter adding, where necessary, to each village site its dependent site or sites. While the writer does not wish to arrogate to himself all of the knowledge of these townships archæologically, at the same time he wishes to add his mite to the growing knowledge of the Huron and Algonquin village sites in the townships above referred to.

Accompanying each site is a sketch map showing shape, size and direction of the ash heaps, and a short memo. of what has been found at each place by careful searching, verified in many instances by a further visit and search.

The township of South Orillia has been mapped and all of the sites located thereon, so far as the ability of the writer allows, showing the main trails which in every instance followed the highest ground of the locality. The village sites without a solitary exception were all located near springs or running water, and were easily defensible against the assaults of the enemy, dreaded by the inhabitants. The Arendaronnons or Rock clan of the Huron people inhabited this tract of country, and were looked upon as the rock of the Huron defence against the invading enemy. With the Lake Oentaron or Simcoe to the southeast, the villages of Oro to the south, the friendly Algonkins to the north and west, the metropolis of the Huron Cahiague, Kontarea or St. Jean Baptiste Mission was well guarded. The nearness of the Lake Oentaron or Simcoe and Kontarea or Couchiching gave to the Arendaronnons the fishing grounds necessary to provide them with provender during the winter season when the hunting was difficult, and supplies of food hard to obtain, while the many running streams furnished the beaver, the muskrat and mink, all to be taken into account in the larder of the sedentary Huron. The woods abounded in game, and deer, bear, moose and wolves were to be had for the hunting. So that in spite of the tribal differences and emeutes this section was the centre of the Huron society.

The trail by which Champlain departed for his famous raid on the Iroquois in the month of September, A. D. 1615, started from where the town of Orillia is now situate, proceeding to the fishing place, Mitchekun, or the staked place at the Narrows between the lakes Oentaron and Kontarea, they supplied themselves with the necessary provender in the shape of fish, thence by canoe and land along the north shore of Lake Oentaron to the mouth of the Talbot River, from thence across the portage to Balsam Lake, and the system of the Trent waters proceeded to the State of New York. Returning in the month of December of the same year he (Champlain) wintered at Cahiague, visiting during the winter the nearby Tobacco Nation in the Highlands of Nottawasaga township. On his return in the spring he again made a fresh departure on his way home to Quebec, and had reached the lake of the Nipissings when a runner despatched by the Hurons and Algonkins caused his return to Cahi-

gue to settle, if possible, an emeute that had arisen after he had departed, over an Iroquois prisoner adopted by the Algonkins and slain by the Hurons.

Outside of the Jesuit Relations and Journals and the Ducreux inset map of the Missions of the Jesuits we have nothing to found any history on, save and except the village sites themselves, and the remains found therein and thereon.

There are a few of the earlier settlers, who, being of an observant frame of mind, noticed the remains, and have been kindness itself in furnishing any information at their command, and ungrudgingly giving their time to accompany the writer in the search. To these, and they are many, the thanks of the student is due.

I propose to start at the southern end of South Orillia and follow the trails and note the villages as they occur, for all of the village sites have a connection with the trails, being either directly on, or near the highways of this people.

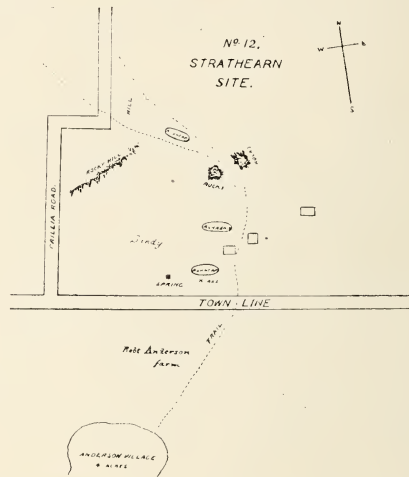
Site XIII. west half lot 13, con. 1, South Orillia.

In addition to that already written the following information and map will be of aid to the archæologist. The village site is on the left bank of the Brough's Creek on the farm at present owned by Mr. Johnston. There are apparent on the surface three large ash-heaps and eight smaller ones. At the highest point of land behind the village is an ossuary between two pine stumps and a number of single graves leading to it along both sides of the trail that runs through the village site. The site of the village is on high, sandy ground on the left bank of the creek, and occupies a commanding position on the trail from Oro township. Excavations have been made and evidences undoubted of Huron occupation have been recovered in the shape of pottery, stone, axes, clam shells and refuse of the cooking places in the shape of bones and broken mealing stones. This site was visited several times, once accompanied by Mr. Boyle, who identified nearly, if not all, of the traces mentioned by this memo. Bone beads are marked, pipe-heads and beaver teeth and a single bear's tooth found in an excavation, this was accompanied by a bone needle or bodkin about five inches long, and a flared mouth clay pipe of an excellent pattern.

Proceeding in a westerly direction from this site along the town line, between Oro and Orillia, the next site come to is on the farm of Miss Annie Strathearn, lately owned by her father, Mr. David Strathearn, and listed as site No. XII (Hunter). On the west half of lot number 10, con. 1, South Orillia. This village is situated directly on the trail leading from the village on the farm of Robert Anderson, in the township of Oro, toward the centre metropolis at Orillia town. On this site there are three well defined ash heaps close to the spring of water never failing. This site is not different from the others, as it is on well drained, sandy soil, having a southern exposure, the land rising to the back of the site and being rocky on the summit of the trail, the trail being very perceptible. In the ash heaps have been recovered the usual remains, pottery, pipe heads, and a mealing stone near the village site. On this site the ash heaps are two on the west side and one on the east side of the trail. At least two iron axes have been found here, one of which is in the writer's possession. This village was in the nature of a guard vil-

lage to the trail, and distant from the Anderson village about five hundred yards, and about a half of a mile from the next site, that on the farm of Mr. William Harvie, listed as site XI.

Proceeding from the last site along the town line between Oro and Orillia the next site is found on the farm of Charles H. Rowe, being the west half of lot 5, con. 1, South Orillia. This site has been partially explored. There are two ossuaries on the fence line next to the woods; I visited this site accompanied by Mr. Boyle, who identified the ossuaries, this site is easily defensible, having a deep ravine on the west towards Bass Lake and a hill sloping at the back rising from the ossuaries about three hundred yards to the highest point. There is a dense swamp beyond the ravine reaching to Bass Lake. These bone pits are distant from the town line about two



hundred yards, and possibly are in connection with the Coleman village site just across the road in Oro township. This site is a new one, and can be listed as site number XXIII., South Orillia.

As the town line a short distance from the last site runs into the waters of Bass Lake we will journey back to the place where the Orillia to Barrie road turns off and go north to the farm of William Harvie, on the east half of lot 9, con. 1, South Orillia. This site is on the trail from the Strathearn site, and is about four acres in extent, ashbeds, and numerous large quantities of pottery being found in the past. This site appears in last year's report as site No. XI.

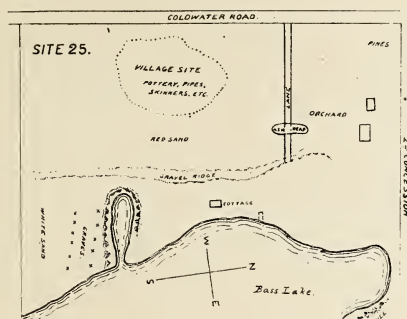
The next site is to be found on the farm of John R. Harvie, being lot 6, in the 1st concession, South Orillia, this is a new site and can be listed as No. XXIV., South Orillia. On this site there are single graves with traces of living places, though these are nearly all destroyed, as the farm is in a high state of cultivation. Visited this site, accompanied by Mr. Boyle, who obtained for the museum two specimens of stone axes, one diorite and one Huronian slate. The graves are in the field to the west of the house, and are on the fence line between two fields, the bodies being in a recumbent position, feet to the east. This site is close to Bass Lake.

Proceeding still in a westerly direction along the concession line we reach the waters of Bass Lake, around which are scattered numer-



ous sites, the first of which is listed as site IV., adjoining this site and, possibly, forming a portion of it, is a small site on the land of Mr. William Forbes, being the part of the southwest half of lot 3, con. 2, South Orillia. There is an ashheap in the lane leading to the lake from the Coldwater road trail 48 feet long, 16 feet wide, and about three feet deep, this lies E-NE. to E. by compass, and is distant 500 feet from the road line. In the field to the west there is a village site, and ash heaps are numerous, pottery, pipes and skinners are plentiful on the high ground near the shore of the lake, and southwest of the village site in connection, the soil is sandy, and on a high tongue of land. This site is new, and can be listed as site No. XXV.

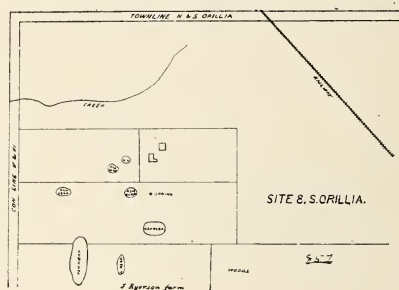
On the high ground, near the shore of the lake and southeast of the site, is the burial ground in connection with the village just mentioned.



Immediately to the south and west of last mentioned site is site No. III., again proceeding in a southeasterly direction we reach site No. II. Visited this site accompanied by Mr. Boyle who obtained for the museum some valuable stone specimens. Immediately across the road and in the township of Oro is site listed No. XXXIII. for the township of Oro, and is situated as described. Mr. Boyle obtained for the museum a beautifully marked gouge stone axe of large size, and other stone implements.

Returning to Orillia, and making a fresh departure in a northerly and westerly direction, the first site met with is that on the farm of Mr. Jesse Ryerson, B.A. On this site there are at least two ash heaps running in an E-NE. direction, one of which is very large and wide. The owner's son has made quite a collection of broken pipe-heads, pottery, bone and stone implements. Went over this site with Mr. Boyle, and he found a broken whorl stone pierced, and two others in process of manufacture, these latter now being in the writer's possession. This site is in immediate connection with that on the farm of Mrs. McPhee, listed as site No. VIII. In addition to that already written of this site the following information may be of value. Soil of village site is sandy, sloping in a westerly direction to spring creek, and having a spring to the northwest on the site. Beads plentiful, being brown runtee and French mottled, about a half a mile from Silver Creek, separated therefrom by a high white sand hill to the north and west. Site occupies about seven to eight acres, and has five large circular ash heaps as shown on the accompanying plan. Three of the ash heaps

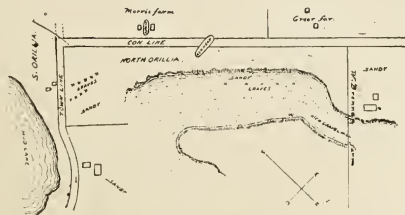
have been measured, and are 18 paces, 15 paces and 17 paces in diameter, and raised about two feet above the surrounding field. Mr. Boyle obtained for the Provincial Museum a small collection of Indian and French beads, bone arrow points, soap stone pipe, flint and brass arrow heads and deer horn pipe, having two holes therein. In the field to the west are the remains of two more ash heaps. As this field has not yet been broken up no measurements were taken. It is supposed that the grave yard in connection with this village is on the next lot, being referred to herein, as site XV., North Orillia, and is a new site not listed. We measured this site, and I give measurements as found. Ash heap in northeast corner of field, 55 feet in diameter; ash heap in southwest corner of field, 52 feet in diameter; and the ash heap in the northwest corner of field, 42 feet in diameter, from this heap the Ryerson ash heaps lie south by compass in the next field.



Proceeding from the last site in a westerly direction along the concession line across the town line the first lot on the right is that owned by the township of Orillia as a sandpit. On the crown of the hill, and lying on the travelled road, is an ash heap of about forty or fifty feet in length, while on the bench above the road is a grave ground. On this same lot, but up the town line in a northerly direction from the concession line, is another collection of single graves. These are just across the road from the house of John Hughes, but on the township lot, and are on the same bench of white sand referred to above. This site is close to Mud Lake, and, possibly, is in connection with the McPhee site and the Greer site, as it is equi-distant from each of these. Has not been listed, site XVII., North Orillia.

On the farm of Joseph E. Morris, on the right side of the road, and to the east of the Greer farm, is another site, and ash beds are numerous. The owner informed me that there was one that was four feet deep just under the edge of his barn, he has found quite a large quantity of pottery, broken pipes, and remains of Huron village sites, this lot has never been listed, and can be placed as site XVI., North Orillia, being part of the east half of lot five in the first concession of North Orillia. This site has a southerly exposure, and is on the edge of the white sand hill referred to in the previous site, but nearer to Silver Creek an affluent of the North River. The ash heap is a long one, not circular as on the McPhee site, possibly of the same system as that already described as lying on the road bed in the last site.

Proceeding in a northerly direction along the concession line the next farm is that occupied by William S. Brennan, being the west half of lot 2, concession 6, North Orillia, listed as site XI. In addition to the information already given of this site there is a small grave ground in connection with the ash heaps back from



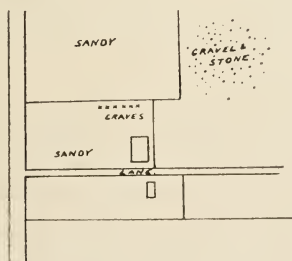
the road on the bench of white sand running parallel to the road line, with a few graves perceptible. The number of the lot was given wrongly by the writer to Mr. Hunter through ignorance prior to the last report, and is as above, not as printed in last year's report.

Still proceeding in a northerly direction along the concession line to the next farm, namely, that owned by Eliphalet A. Brennan, being the west half of lot 3, in the 6th concession in North Orillia. On this farm will be found in the field to the west of the barn a few graves on the rising ground. All of the bodies are lying in a



southwesterly to northeasterly direction, on their backs, not doubled up, with the head to the southerly side. No traces of ash heaps on this farm so far as known, there are at least six full grown persons buried in this plot of ground. The soil is sandy, and has a southerly exposure, and slopes rapidly to Silver Creek.

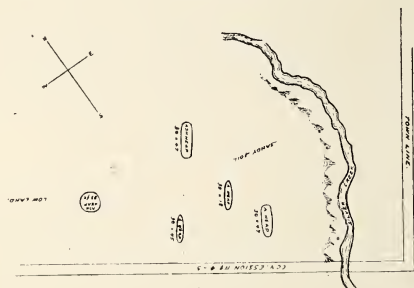
The above is a new site, and can be listed as site No. XVIII., North Orillia. Just across the road from the last site and on both sides of Silver Creek lies the farm of the Quinn estate. On this site is a large village site, and burial ground. Sufficient has been done



to identify this site, but requires more search to make a map of it. This is new, and can be listed as site No. XIX, North Orillia. This lot is numbered 3 in the 5th concession in North Orillia.



Returning towards the town of Orillia the next lot is that of Mr. Geo. Greer, namely, the southeast quarter, lot 2, con. 5, North Orillia. On this site are found iron and stone and clay implements and was apparently quite a large village site. Mr. Boyle obtained here some very interesting clay pipe specimens, one a perfect eagle pipe, and a soap-stone pipe. The owner, Mr. Greer, was very kind, and accompanied Mr. Boyle to the next site visited, that on the English church lot now held by Mr. Greer under lease, being the site listed as No. IX. 1903 Rep. On this site are three large long ash heaps, and one circular ash heap, of which measurements were taken by Mr. Boyle, and compass directions. This site has apparently had a long occupation by the aborigines, as the ash heaps are very distinct, notwithstanding that the field has been in a high state of cultivation for a long time. The writer has gone over this site several times and verified measurements, beginning at the ash heap on the southeast side of the lot, the sizes are as follows: ash heap No. 1, 47 feet long, 30 feet wide; ash heap to the west, 45 feet long, 30 feet wide; ash heap to the northeast, 30 feet by 18 feet; ash heap to the northwest, 47 feet by 30 feet. To the west of these ash heaps there is a circular ash heap 33 feet in diameter.



From the last site proceeding in a westerly direction along the concession line the next farm is that listed as No. VIII., and owned by Mr. A. Fyfe. Mr. Boyle obtained for the Provincial Museum four pipes and a couple of clay beads that are rare. At the back of the farm there is an excavation, doubtless, prepared for an ossuary, though not used by the Hurons, it is about twenty feet across, and about six feet deep, in white sand, and has growing in the middle of the pit a large tree.

Across the road from the last mentioned site is the farm of Mr. John Ego on which is an ossuary now rifled of its contents, and back from the ossuary in the bush is a single grave with a pine slab at its head, marked "Anderson".

Referring again to the report of 1903, in the report reference has been made to Chief's Island as site No. X., and certain finds have been listed as coming from this place. These articles were obtained from the grave on the northeast end of Horse Island, being that of the brother of the late Chief Yellowhead, James Yellowhead. This island is now the property of Lawrence Heyden, of Toronto, and he has had the grave protected from vandalism. As the site is new, and not one of the Hurons, but of the Ojibwas, as the site of Chief's Island undoubtedly is, perhaps it will be well not to list same. The graves

on Chief's Island are all Ojibwa with one exception, that of the missionaries' wife, and are intact. This island is now and has been the possession of the Yellowheads, the hereditary chiefs of the Rama band of Indians, they have never lived on the island, nor have any other Indians in living memory, as this ground is to them sacred.

At the Narrows to the west of and south of the site No. XXI. there is on the extreme point of land on the old Oak Orchard a number of burials, and these bodies can be found under and near the flagpole in front of the residence of the late Albert Fowlie, P.L.S. As this site is new, or, rather, an extension of the site No. XXI, it is well worthy of noting. Arrow points are numerous here, stone and bone. The ground is high and sandy back from the shore of Lake Simcoe, where the burials are. Returning to the town of Orillia, the plot of land bounded by Colborne, Wyandot and Albert streets, and the Barrie road, will yield rich finds to the archæologist, as it has all been buried over by the Hurons, and the remains from time to time are unearthed and reburied. This site has not been listed, and is new and can be listed as site No. XXVI. On the lot to the west and south of Samuel Warren's residence there are a number of burials, and to the back of this site and a couple of hundred yards away is a never failing spring creek flowing from the Mount Slaven site.



On the crown of the hill on the site of the stores of Geo. Vick & Sons, Mississauga street, have been found a number of Indian remains in the years gone by. Mrs. Vick has in her possession a small pot found here while excavations were going on. Immediately to the back of this site or portion of site stood the old northwest trading house on the crown of the hill on the land owned by Mr. Vennor, afterwards used as a mission house while the Indians were here prior to 1836, when they were moved to their present location in the township of Rama by Sir John Colborne. This plot is in touch with the old Narrows trail from Medonte, and is on the north side of the trail.

The soil is sandy white and well drained, as is usually found, and is distant about three hundred yards from the shore of Lake Couchiching.

On part of lot two O.M.B., town of Orillia, nearly opposite the roller mill of Geo. Vick & Sons, a body of one of the defunct aborigines was found in August 1st, and measurements taken of the body, the skull being forwarded to the museum. The measurements are as follows: Length of body from first cervical vertebra to heel, 6 ft. 4 in., depth of body in earth, 2 ft. 6 in., lying feet to the east by compass, on back, hands crossed in front of plevus, the feet lie 74 ft. 8 in. from street line, on the west side of the lot, and about two hun-

dred feet from the old water line of Lake Couchiching. On the town park between two trees is the body of another of the Hurons, this was raised some time ago and reburied by the order of the authorities, and was the body of a young person from 18 to 25 years old, by the estimation of the medical gentleman who saw as to the disposal of the remains. On the hill on the north point of the park is another burial, this has also remained untouched by order of the town.

Now taking the wide range of burial from the railway to the south, to the north point of the park to the north, place it in connection with the Mount Slaven site, as it undoubtedly was and is, one can easily imagine an immense population at this point of the Huron country.

The trails all centre here, the water communication is good, the soil sandy, the water supply good, hence after eliminating all other sites less able to fill the bill, one can easily say that the site of Cahia-gue or Kontarea, or St. Jean Baptiste Mission of the Hurons was here.

On the lot of land owned by Geo. W. Reeve, of the town of Orillia, being the south 6 acres of the centre 25 acres of the west quarter lot 7, in the 4th concession of South Orillia, is an immense ash heap guarding the Coldwater road trail, and is over 80 feet long, 16 feet wide, and very deep, lies east and west by compass. This site is on the crown of the Algonkin shore line, and has never been listed, and can be placed as site No. XXVII., South Orillia. To the south and west along the Coldwater trail to the corner of the concession there have been found large quantities of stone, iron and bone implements, and pottery fragments.

Going in a northerly direction from the last site along the highlands to the farm lately owned by William Calverley, Esq., J.P. On this farm have been found large quantities of iron axes and pottery fragments. This site is new, and has not been listed, and can be placed as No. XXVIII., South Orillia, and is situated on lot east half of lot 6, in the 4th concession, South Orillia.

Going still in a northerly direction from the last site to the farm of Albert Lehman, being the part of B. L. 5, in the 6th concession, South Orillia. On this lot is a small ash heap situated on the shore of the lake, and commands a view of the town of Orillia, the Narrows, and the islands of the Lake Couchiching, and was apparently a guard house on the shore of the lake. This site is in the orchard to the northeast of the house, and is almost obliterated by cultivation. Broken pottery is plentiful here. The owner has in his possession a number of black stone skinners or axes found here, and a couple of arrow points, flint or chert, one large spear point stone. This site is new, and can be listed as site No. XXIX., South Orillia.

## LAKE ST. GEORGE.

During the summer of 1897 a very cursory examination was made of the peculiar embankment that forms an almost complete enclosure of this lakelet.\* This was in the year following the identification of the Otonabee serpent mound on Rice Lake, and when quite

\*Annual Archaeological Report for 1897-8, p. 44



a few correspondents in various parts of the province directed the attention of the curator to what they regarded as possible or probable structures of a similar kind.

No conclusion having been reached at that time respecting the origin of the bank surrounding this body of water which covers about a hundred acres, it was thought well to spend a few more hours in going over the ground last summer, when, in company with Mr. J. H. Hammond we were making a pretty thorough examination of many recently discovered, and some formerly known Indian localities in the township of Orillia. We were accompanied by Messrs. Wm. O. Black and J. P. Secord, the former because from long residence in the vicinity, he knew every foot of the ground in the woods as well as in the open, and the latter because he not only first directed attention to the embankment as a probable serpentine structure, but because he desired to point out what he regarded as identifying details. He and Mr. Hammond used spade and shovel manfully near where the head with open jaws and enclosed egg were supposed by Mr. Secord to be, but they did not succeed in convincing themselves that the proof was very good.

While they were thus employed Mr. Black engaged himself in tracing by ear and by sight the underground outlet of the lake to its mouth on the shore of Lake Couchiching, and in accompanying me to examine the formation of the elevated, eastern shore line in the bush, where it is much lower, and less regular than at any other point. Indeed, for about two hundred feet here, there is no bank at all. We left the place in quite as much doubt as when we reached it, and I feel convinced that it would prove educationally advantageous to have the opinion of a geological expert respecting the formation of this very remarkable circum-lacustrine barrier.

As the interested reader may not have an opportunity to refer to the brief account of this embankment in the report for 1897-8, now out for print, it will be pardonable to quote a few descriptive sentences from it.

"Here, undoubtedly, we found a bank of very artificial looking formation, and we decided to follow it round the lake in a general way at first, and afterwards to make some examinations in detail, if such should be thought desirable. We thus found the ridge to vary in width from nine or ten to thirty-eight feet. At the eastern end, for a distance of a hundred and ninety-two feet, there is no ridge whatever. South of this gap the slope of the ground is to the outside only. On the southwest side there is a portion that is not more than ten feet wide, and two and a half feet high, on the outside of which lie several granite boulders, and a little further westwards there are numerous similar stones in the bank itself. A little west of south, the ridge widens to thirty feet, and rises to three and a half, the outside being higher than the inside.

On the south there is an elevation about twelve feet high, between which and the ridge proper there is a trough two hundred feet long, and two and a half feet deep, and at intervals along both elevations boulders appear. In walking over the whole of the bank we found

\* Annual Archaeological Report for 1897-7, p. 44.

†Mr. Hale, junior, of Orillia, was present at this time, and was of great assistance.

it to be within from twenty to fifty feet of the water, except at the west end where the distance between the two must be nearly a hundred yards, the intervening space being mostly a bare bed of limestone.”

### THE CAHOKIA, OR MONK'S MOUND.

Having been commissioned by the Honorable, the Minister of Education to attend the International Congress of Arts and Science at St. Louis, I was thus afforded an opportunity of seeing what is said to be the largest earthwork in the United States, commonly known, in books, as the Cahokia mound, but locally known as Monk's Mound. The latter name has been given to it on the supposition that a small body of Trappists settled in the vicinity in 1810, and occupied the summit of this mound as a domicile. This is now said to be an error, although it seems quite certain that these monks did make use of some smaller mounds for domestic purposes. The former name is also a misnomer, for, according to Professor Putnam “there is not the slightest evidence that the Cahokias, of the time of La Salle, were the builders of this or of other mounds in the vicinity.”

This earthwork is the largest of a group numbering nearly seventy on what is known as the American Bottom, and is situated some six or seven miles northeast of East St. Louis, in Illinois. It is said to cover sixteen acres of ground, its greatest dimensions being 1,080 feet from north to south, and 710 feet from east to west, while its height is stated to be one hundred feet. Seen from either the eastern or western side it shows distinctly two terraces.\* It has been described as a truncated, rectangular pyramid, but whatever it may have been, there is little about it at present time showing any regularity of form.

It is somewhat difficult to make oneself believe that so huge a piece of work, simple as its structure is, can be the result of human effort, and one begins to incline to a conviction that it is, only when he sees the evidences of workmanship on its terraced sides. I was informed by Mr. John Monteath, a resident of St. Louis, who kindly accompanied me, that when the water of the Mississippi rises thirty-two feet above its normal level, the American Bottom is all submerged, so that these terraces suggest Babel-like attempts to provide a place of retreat during periods of high water, and we must take into account that in former times the Mississippi, in common with every other North American river, rose much higher, and remained longer in flood than at the present time when so much of the forest has been cut down, and so many obstructions to currents have been removed. From this point of view the lowest terrace on the south side forming nearly one quarter of the area of the whole mound may have been found too low when the water was unusually high. The second, in this case, would have been constructed to meet such an emergency, and what is called the third terrace, at the northeast angle, is probably only a part of the second, where the work has been carried on a little further, or it may be the beginning of a third.

\*Most writers who refer to this mound speak of a third terrace. To my eye no such elevation was perceptible.

From the southern face of the lowest terraces, and some distance east of the centre, there exists what may be regarded as having been at one time a roadway from the lower field-level. I am not aware that any thorough examination has been made, so far as the interior of this earthwork is concerned, but on the fields all around this and the neighboring mounds our little party, consisting of Mr. and Miss Monteath, and myself, were able to pick up numerous chips of chert and some fragments of pottery, the former being the result of work done on material brought from the great Flint Ridge of Kentucky.

## RUPERT'S LAND INDIANS IN THE OLDEN TIME.\*

BY JAMES STEWART.

[The following paper by Mr. James Stewart, (now well advanced in years and residing at Prince Albert, Saskatchewan) was forwarded to us by Mr. Basil G. Hamilton, of the Canadian Pacific Railway Co., Calgary, Alberta.

Mr. Stewart's story is exceedingly interesting, ethnologically, and proves the writer to be a man of unusually excellent observing power, as well as one possessed of good narrative qualities, with a dash of humor.

The whole paper bears the impress of originality, relating as it does to phases of belief and custom among a people of whom comparatively little has been written, viz., those in Manitoba and the territory adjoining to the east in what is now the district of Rainy River, Ontario.

Mr. Stewart was in the service of the Hudson's Bay Company.

For the information of younger readers it may be stated that Rupert's Land was the former name of our North West Territories, including what we now call Manitoba.]

Now being fairly ensconced among the uncivilized Indians around the shores of Lake Winnipeg, I will endeavor to describe their religion, their superstitions and social habits as they were observed about forty years ago.† The tribe of Indians that was under the surveillance of the Hudson's Bay Company's post at Beren's river went under the name of the Bungays, a name I have not heard of in any other part of the country. Their language was a dialect between the Cree and the Chippewa, both tongues being understood by them. At the time I am writing these Indians knew nothing whatever of the christian religion, they might have heard of it from their brethern at Norway House, but were utterly ignorant of its meaning. The Indians at Norway House who were converted to the christian religion were mostly Crees, as I have said, a shade different from the Bungays of Beren's river. They had hardly anything in common, and did not have much intercourse with each other, except it might be when the men worked together in the company's boats going and returning to York Factory.

Their religion was not monotheistic by any means, for they had "gods many and lords many." Of course, there were two principal ones, namely, Geeche Manitou, the Great Spirit, and Matche Manitou, the Evil Spirit; but there was a set of underlings, as it were, too numerous to mention, for everything in nature almost, both animate and inanimate, had its presiding deity. Every kind of

\*Rupert's Land included what now forms the greater portion of New Ontario.

†This was written some twenty or thirty years ago.



beast, bird and even fish, had its attendant spirit. And then the four winds of the heavens were so many spirits, the sun, moon, and stars, the clouds, lightning and thunder, had each its spirit, all of which influenced the lives of the poor Indian. It may be well supposed that with such a multitude of divinities in their sacred catalogue, superstition would be rampant, which was the case. Many of these superstitions were, no doubt, sad to contemplate, while others of them were comical in the extreme.

With regard to the two principal divinities, Geeche Manitou and Matche Manitou, the Indians worship the latter as well as the former. According to their belief the Great Spirit is certainly the Supreme Ruler of all things, even over Matche Manitou, the Evil Spirit; but he is more particularly the tutelary deity of the white man, and is too highly exalted to take any interest in the poor Indian. Furthermore, as he is the personification of goodness itself, and will not willingly injure any poor Indian unless he wantonly tries to do harm to the white man, these people thought there was no necessity for propitiating the favor of such a harmless being; therefore, they set him aside as one from whom they had nothing to fear. But Matche Manitou, the Evil Spirit, being, not an imp of the devil, but, the devil himself, was the object to be dreaded, whose favor they ought to endeavor to obtain, and whose wrath they ought to endeavor to conciliate to the best of their ability. But still, after all, according to their belief, he was not such a malignant personage as our theologians would paint him. He could, by repeated supplications and offerings, be persuaded to do a good turn to his suppliants occasionally. Hence there was a kind of half friendly feeling towards his Satanic Majesty among the Indians, which I can hardly blame them for. Even among the clergymen of my own Scottish home a kind of sympathetic feeling is exhibited for his brimstone Majesty. For instance, a Scottish clergyman, in winding up his prayer, presented the following petition: "And noo, O Lord, if it be thy will, dae thou hae mercy on the puir deil, an' a' the praise and glory shall be thine, Amen."

The next deity of importance in Indian Mythology is Wesseke-Jack,\* a sort of gentleman-foreman-god, whose business seems to have been to superintend and direct the work of creation, and oversee things in general afterwards.

In the work of creation, having first made the trees and herbs of the field, he next turned his hand to make all the mammals, reptiles, fowl, and fish; but at that time there was a great scarcity of light upon the earth, the sun being only an occasional visitor to this globe. Anxious to keep the sun from wandering away on his next approach to the earth Weese-ke-jack set an enormous trap to catch him, something like a gigantic bear-trap. This accomplished the desired end, for the very next time the sun came near the earth he became caught in the trap. In vain he struggled to get free; the cords by which he was held were too strong for him. But

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\*In the mouth of the white man this becomes Whiskey Jack. This name is now given to the Canada Jay, or, as the lumbermen call it, the meat-bird (*Perisotus canadensis*) which seldom comes south of Muskoka. In the fall of 1904 they appeared in Toronto, in large numbers.—D. B.

the proximity of the sun to the earth and its inhabitants was highly dangerous, the heat being so great that everything animate or inanimate was in danger of being scorched. The spirit of the sun knew nothing of this, however, therefore, Wesse-ke-jack concluded to drive some sort of compromise with the sun, before he would consent to give him his liberty. After a long confabulation between him and the spirit of the sun, whose name was Aneneke, it was stipulated that the orb was to come near the outer edges of the earth only in the mornings and the evenings, and, during the day, to keep at a respectful distance, just near enough to warm the earth without scorching it. On the other hand Kee-wa-tin, the spirit of the north wind, was ordered by Wesse-ke-jack to keep at a respectful distance from the sun when the days were long, so as not to counteract the effects of his beneficial warmth. But during the short days of the year, Kee-wa-tin was permitted to blow upon the earth and bring snow and ice in its train so that the bear, the frogs, etc., might enjoy their winter sleep without molestation. On these conditions, which were mutually agreed upon, the sun was to get his liberty.

But now another difficulty presented itself. The sun had not the power to loose the bands by which he was held, and the heat emanating from him prevented either Wesse-ke-jack or any of his creatures from approaching the sun to cut his bands and set him free. Wesse-ke-jack made a proclamation among his creatures that any of them that would set the sun free would receive particular favors from high quarters.

The beaver at that time was a sort of insignificant fellow not much thought of by the rest of the animal world, having only a few small teeth in his head, and having hardly any caudal appendage like the rest of the animals, his tail being only a small stump about two or three inches long. Yet, withal, he was about as conceited as a Dutch Editor. . . . He, therefore, walked boldly up to headquarters, and offered to release the sun. At first Wesse-ke-jack looked upon the beaver with the same misgivings that Saul looked on David when he offered to go out and fight the Philistine; but, being assured by Mr. Beaver that he would perform the task, he was permitted to go. The beaver set off at full trot, and succeeded in gnawing through the cords which held the sun without being quite roasted alive. The cords being cut, the sun arose majestically from the earth as a large balloon, when the ropes which attach it to the earth are let go.

But was not the poor beaver a pitiful sight when he presented himself to Wesse-ke-jack on his return? His teeth were burned away so that only two or three blackened stumps remained; his hair which formerly represented that of the swine,\* was burned off, leaving only his blackened skin. Altogether he was an object of pity. But Wesse-ke-jack, in gratitude for his deliverance from the burning rays of the sun, proceeded to reward Mr. Beaver in a princely manner. He, in place of the rough, hairy coat he had previously, was clothed by Wesse-ke-jack with a beautiful soft coat of fur which was the envy of all the other animals; and to compensate for the loss of his teeth he was furnished with a new set, broad and sharp, admirably fitted to cut down trees. But in order that it

\*A recent addition or change. The pig is not indigenous in America.

should be kept in remembrance whence he derived these favors his teeth were made of a brown color as if they had been scorched by fire. And this is how the beaver came by his chisel-like teeth, and furry coat.

Wesse-ke-jack having thus settled the sun, and the general temperature of the earth, now proceeded to make man. In order that man might be made good and strong, Wesse-ke-jack concluded to make him of stone. Having picked out a rock that suited his purpose he spent many days in hewing out the figure he wished to make; the stone being very hard and his tools none of the best. After working for a long time, however, he managed to get the figure of a man made that suited his purpose. Wesse-ke-jack was so proud of his workmanship that he, after setting his man of stone upon his feet, before putting life into him, walked backwards to see how his man would look from a remote point of view. When he had thus walked a goodly distance from his object of admiration, he stood gazing for a long time in silent contemplation and satisfaction with the complete job he had accomplished. But, while thus employed, a malicious bear happened to peep out of his hole, and espied the figure as it stood in all its grandeur. Filled with envy he rushed up to the newly made man, and, like a pig against a stone wall, began to root viciously against the model man. The consequence was that before Wesse-ke-jack could interfere, Mr. Bruin had knocked the man over, who, falling upon the hard rock, broke into a hundred pieces.

Wesse-ke-jack was terribly enraged that by this untoward accident his great work was thus destroyed. For a time he would neither eat nor sleep, being so grieved at the disastrous end his many months of work had come to. However, he determined to make another attempt to form a man, but concluded he would not spend so much time over it this time. He set to work to make one of clay, and in a little time had one nicely made which, after setting in a secluded place, he left it to dry in the sun. This being done satisfactorily he endued him with life, and thus we have man as he is at the present day; but the Indians still lament the untoward accident by which the man of stone was destroyed, as had Wesse-ke-jack succeeded in putting life in the man of stone, the human family would have been ten times stronger than they are now.

But in process of time Wesse-ke-jack found he had an unruly family to deal with. All the creatures of creation began to prey upon each other. Loud complaints were made against the fox because he attacked the birds and killed them; the fish complained against the otter for the same thing; while the bear set up a dismal groaning because the winter was so long he could get no berries to eat. But the greatest complaint was made against man because he ate everything that came in his way; beasts, fowl, fish, and berries were all devoured by this creature. The clamor of all these lower animals became so great that Wesse-ke-jack determined to call a general council to see whether he could not bring order out of chaos, and reach some agreement by which all these grievances would be remedied. Accordingly, a general proclamation was issued summoning all spirits of the various living creatures before him at a certain date.

When the time arrived there was a mixed multitude convened,



which proved to be of a very unruly set. The noise and confusion were something terrible, which Wesse-ke-jack, with all his skill, could not control. In vain he tried to get the crowd to keep still and listen to reason, there was no end to the continued noise they were making.

Wesse-ke-jack finally lost his temper, and became very wrathful. The most noisy one in the crowd was the frog, which, in spite of all that could be done, kept up an incessant chattering and croaking. Wesse-ke-jack got so enraged at the cheek of Mr. Frog that he dashed some glue over the mouth of the frog with the hope of stopping its chattering forever. But this was of no avail, the frog blew the glue out, but part of it remained around the corners of his mouth, which is the cause of the white streak there to this day.

But nothing could be done to allay the storm and tumult of this convention. Wesse-ke-jack, therefore, dismissed them all, vowing vengeance on the whole pack of them.

His next exploit was to build an immense canoe, into which he took a pair of every kind of living creatures, intending to drown all the rest. Accordingly, when he had all his cargo aboard, he stepped into the canoe, and, forthwith, the whole earth sank beneath the water, causing the death of all living creatures, with the exception of those who were with Wesse-ke-jack in the canoe.

This state of affairs continued for some time, Wesse-ke-jack, with his living freight, went cruising about on the waste of waters for many a long day, until at last he became tired of that kind of life, and, forthwith, decided to make a new earth. But, in order to do so, he must have something to make it of. He, therefore, commissioned the otter to go down into the waters and bring him up some mud, so that he might make a new earth. But once the otter got back into his native element, and finding fish plentiful, he never returned to his master with the mud.

Wesse-ke-jack, finding the otter did not return, sent Mr. Muskrat down to bring him some mud. Now at that time muskrats' tails were very short, and only small affairs. Mr. Muskrat went down as directed and gathered a goodly armful of mud and straightway came to the surface of the water, but when Wesse-ke-jack put forth his hand to take the mud the muskrat, with a twinkle in his eye, and a roguish smile on his face, as much as to say, "catch me if you can," made a swift turn and dived under the water. Wesse-ke-jack made a grab for his ratship, but only succeeded in catching his stump of a tail, which stretched cut and slipped through his hand, and the rat got away. But since that time the rat has had a long slim tail, which is neither useful or ornamental.

Wesse-ke-jack, being thus twice thwarted, was highly indignant, and threatened all sorts of vengeance against the otter and muskrat. Having cooled down a little he asked the beaver to go and get him some mud. Accordingly, the beaver went down to the bottom and brought from there quite a large handful of mud which he handed gracefully to his master, who was quite delighted, and he straightway made a new earth. Everything being finished, he caused the living part of his cargo to land and enjoy themselves as best they could. But he did not forget Mr. Beaver for his services. He,

instead of the stump of a tail he formerly had, received a broad, flat trowel-like tail with which he could plaster his house.\*

While speaking of the Indians, their habits and mythology, I may make mention of one of their festivals at which I had the good fortune to be present.

This festival is usually held in the spring of the year. It is, I was led to understand, the most important of all their religious ceremonies. Their code of religious duties is contained in the precepts laid down by the chief master of ceremonies. It is a sort of secret society which has lodges all over the country from Lake Superior to the far north.

The name of the feast is "Metawin" or "feast of long life." The head-centre lodge, or tent, was established in the east by some of the divinities. I was not able to learn which, but its sole purpose was to insure long life to all those Indians who obey its behests, and to grant remission of sins to all Indians who follow its precepts. The centre lodge remains in the east, and its exact locality cannot now be found, but on account of the migration of the Indians, they received power and instructions to establish subordinate lodges.

The first subordinate lodge was established, it is said, by medicine† men, somewhere in the vicinity of Lake Winnipeg (Superior?) five or six hundred years ago. Its mysteries were ordered to be performed every alternate year, forever, and from this lodge the several tribes of Indians in North America received their power to institute branch lodges.

Each lodge had its Grand Master of Medicine, a Master of Ceremonies, and other minor officers. Each member of the lodge had in his possession the bag of life. This bag consisted of the skin of a certain bird or animal, such as the skin of a beaver, owl, mink or muskrat. Sometimes they were made of the skins of snakes, in fact, almost any kind of small skin was used.

These bags of life were highly ornamented with beads or porcupine quills, and contained medicine of the most select kind.

The Metawin tent of life was long and narrow, with its doors, in all cases, facing the east and south, and carefully covered with leaves so close that the eye of the outside observer could not see into its mysteries, and thus pollute its sacred precincts.

Through the intercession of Mr. Cummings, and a liberal quantity of tobacco, tea and sugar from myself, I was permitted to enter this sacred place. The chief, who was my conductor, led me into the tent, into which we were no sooner entered than we were saluted with the beating of drums, and a salutation which sounded something like, "Ne Kau, Kau nah, Ka na nah."

The chief led me to the centre of the tent, where stood the wooden images of the goose, the duck and the fox, and some other deities which I did not at that time notice. Here I was told to deposit my offerings of tobacco, tea and sugar, which I did, amid the tomtom of the drum, and exclamations of approval from the Indians.

I must confess that at the time I had serious misgivings whether I was not committing a sin by making an offering unto idols, but

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\*There are many variants of this story among the Ojibwas. Nanaboosh usually takes the place of Wesse-ki-jack.

†"Medicine" as applied to Indians of this class, is a corruption of Metawin, the feast of long life.

as I did not intend it as an act of worship, but merely did so in pursuit of knowledge, my conscience was quieted on that occasion.

After this ceremony was performed I was set down at the end of the tent near where the chief men were assembled, when I was treated to a dish of boiled sturgeon, being very glad it was sturgeon instead of boiled dog, of which I saw plenty around me.

The ceremony of my reception and partaking of the food being over, I now had leisure to see where I was, and what my surroundings were. As I have said before, the tent was long and somewhat narrow, with several poles stuck in a straight line down the centre, which supported a cord on which were suspended offerings made by those penitent sinners who came to obtain pardon for their misdeeds, as also the offerings of those who had made a good hunt during the past winter, and of those who had recovered from some sickness. These offerings consisted of various articles, such as pieces of printed calico, clothing, guns, knives, ammunition and other things. At the foot of each pole were placed roughly-made wooden images of various birds and other animals, while at the head of the tent, where the chief men sat, was a sort of image representing a human form, partly of wood and partly of clothing, which, I was informed, was the god of medicine. The spectators were seated close around the sides of the tent, sufficient space being left between the assembly and the line of the tent poles in the centre to allow those who performed their religious rites to march around, which was done in a sort of half run, half walk and part dance, and uttering a monotonous chant while the drum at the end of the tent kept up a continual tom-tom.

The origin of this peculiar kind of worship, according to Indian tradition, is as follows: Geeche Manitou, or the Great Spirit, revealed three mysterious ceremonies to man shortly after his creation, about the time the first pair had grandchildren born to them, and before death had entered into the world.

At that time there existed two powerful snakes which had existed from the beginning of the world, the rattlesnake and the natawa. They lived together in harmony for many years, but at length the rattlesnake grew jealous of the powerful and deadly natawa, which envy so increased that the rattlesnake challenged the natawa to try which of them possessed the most deadly poison by inflicting a bite on mankind. The natawa demurred at first, not being willing to disturb the peace and harmony which prevailed in the world, but from day to day the rattlesnake so taunted him with cowardice that the good-natured natawa consented to accept the challenge.

At that period there lived two powerful chieftains near to each other, who were on great terms of intimacy. Each had a son grown up to manhood who loved one another sincerely, and often used to hunt in the woods together. During one of these rambles it came to pass that the rattlesnake and the natawa waylaid them for the purpose of inflicting a wound on each to see which of their poisons was the most deadly. The young men, unconscious of danger, happened to pass the thicket where the two snakes were in ambush, when all of a sudden the two reptiles sprang upon them and gave each of them a sting. The young man who was bitten by the natawa instantly dropped dead from the effects of the poison, while the other had time to run to his father's tent, which, when he had reached,



a noted medicine man applied a powerful antidote to the wound, and he recovered in a few days.

After the deed was done the natawa snake was grieved and enraged at the rattlesnake by whose guile he had been instrumental in bringing death and sorrow to mankind.

"Brother," said the natawa to the rattlesnake, "you have been the cause of bringing death and misery to mankind by your envious and evil designs, therefore, you shall ever after this have a rattle in your tail to warn every being who approaches you of your hateful presence, and the human race shall pursue you to death.

The old chieftain, whose son had died of poison, brought the body home, and with his tribe performed the burial ceremony. Every day the old chieftain repaired to the grave of his beloved son, and mourned his loss bitterly. The friends of the old man endeavored to console him in his grief, but he would not even speak to them.

During one of his daily visits to the grave of his son he saw an enormous snake striped with various colors like a rainbow ascending out of the earth, who thus addressed him: "Old man of the plain, I command you to appear at this spot on the third day following this, and you must implicitly follow my directions and obey my commands. Then shall appear to you a snake on this very spot, he shall be sent by the gods. You will elevate the serpent three times by the horns, and at each time you raise him you shall repeat the words of adoration to the snake by saying "Ne Kau, ne Kau, Ka nah, Ka, Ka, nah. Oh! oh! oh!" Immediately after you have performed, the snake shall appear to you as a manitou of your race, who will teach you the ceremony of the Metawin or the tent of life, and reveal to you the mysterious rites which come from the happy hunting grounds, and from the centre of the earth, and from the depths of the waters. The spirits take pity on your sorrows, and will help you if you obey them. Adieu my son, you will point to the centre of the heavens, the centre of the earth, and to the four abodes of the spirits with your pipe stem, while I slide down the perpendicular rock of our abodes.

At that instant the snake disappeared downwards with a tremendous hissing sound, caused presumably by the rapidity of his descent.

According to the instructions of the great snake the old man repaired to the grave of his son on the third day, and after pointing his pipe stem to the centre of the sky, and the earth, and the four winds, presented the offerings of the dead, then sat down, facing the body of his son, who, according to the Indian custom, was placed in the grave in a sitting posture with his face towards the east. At that instant he heard a rumbling noise, and, lo, an enormous serpent appeared before him, having two horns, and whose jaws contained two rows of large teeth.

The serpent lay down and twisted itself into a circle around the grave. The old chieftain arose from his seat and took the serpent by the horns and elevated it three times, at each time repeating the magic words, "Ne Kau, Kau nah, Ka, Ka, nah." At the third time the serpent changed its shape into that of a venerable old man with white hair, having a rod or wand in his hand, together with the fire bag of life made of the skin of the deadly natawa which contained the magic bead. He thus addressed the old chieftain.

"I have come to comfort and console you for the death of your son. The spirits of the earth, the wind, and the water have seen your sorrow, and I am sent to your race to show you the way of life which you will teach to your children, and which shall continue to the end of time. Now, therefore, light your pipe, and with your stem point to the sky, the abode of the Great Spirit, who shall give you life, to the abode of the spirits of the centre of the earth, whose will is to teach you the virtue of all herbs, and to the four winds who will protect you and give you power and success."

After the old chieftain had completed pointing with his pipe stem to the sky, earth and air, he offered his ghostly visitor the pipe, but the old man raised his wand and touched the mouthpiece, when, immediately, was heard the tapping of a drum. After three knocks of this mysterious sound the old man commenced to repeat the following, "Nē Kains, ne Kains, ne Kains, Kau nah, na ka nah." He then chanted a song, of which the following is a translation:

"I come from the east,  
Where the long tent does rest,  
The Great Spirit does say,  
Perform these rites alway."

After chanting this medicine song for some time, the old man sat down near the chieftain, and taught him the ceremonies and rites of the long tent of life, which occupied some days, the Indians say the moon changed once during the time that the old chieftain was receiving his instructions in all the secrets of the tent of life. After the old chieftain had been fully instructed his preceptor said:

"I will bless you with long life, and you shall have more sons, but forget not my instructions. I leave you this bag of natawa skin with the magic bead, and this wand. Beware, pollute not my tent of life. Adieu my son, I go hence, but I shall near you when you chant the mysteries I have taught you." Saying this the white-haired spiritual adviser vanished from the gaze of the old chieftain.

After some months, when the old chieftain's mourning was over, and after celebrating a feast with his tribe, he commanded that all males should assist him in building the long tent of life. During the evenings he employed himself in teaching the males of his tribe to sing the mysteries imparted to him by his spiritual teacher, and after having succeeded in giving them sufficient knowledge in all the rites and ceremonies pertaining to the tent of life, he appointed the various officers to the tent, but he, himself, was Grand Master.

During this time, which took several years to accomplish, the old chief was gladdened by having a son born to him, the very image of the one who died by the sting of the natawa.

The foregoing is the account of the origin of the feast of the natawa,\* or, feast of long life, as related by the Indian called Bear through the interpretation of Mr. Cummings, and now I shall endeavor to give a description of the ceremonies I saw them perform at the feast when I was permitted to be present.

The Grand Master, in giving notice of the meeting, sends a portion of tobacco to all the members of the lodge, with a request to

\*He here calls it feast of the natawa for the first time; heretofore it has always been "the feast of the Metawin." In view of its origin it looks as though natawa would be more correct.—B. G. H.

celebrate the feast of the natawa, or long tent of life, which generally takes place about the spring of the year, or in the summer season.

In the first place after meeting, the tent is erected in the form I have described. This being done, the Grand Master and the Master of Ceremonies collect all the members, and approach the tent on the east side, and then march around it three times following the course of the sun.\* At the third time around, the Grand Master halts opposite the entrance, and advances three times, essaying to enter, and three times retreats, meanwhile singing as follows:

"I approach but fear  
To be near thy presence,  
Oh! Oh! Oh! Oh! Oh!

As he finishes this chant the Director of Ceremonies with his wand lifts up the door, and the Grand Master enters, followed by all the members. He then chants the following:

"I have entered, I have entered,  
Long life to gain, long life to gain  
Oh! Oh! Oh! Oh! Oh!

Then they march around the inside of the tent three times, each in the costume of his order, and each having in his hand his skin bag and magic beads. The members then takes the seats allotted them by the Director of Ceremonies, while the Grand Master takes his stand near the image of the god of medicine with the drum and knocker in his hand. He taps the drum three times at each interval, repeating the words "Ne kan, ne kan, kan na nah, ka na nah." He proceeds to address the company in somewhat the following strains:

"The Great Spirit, who dwelleth in the heavens, bless you all and send you long life. The white haired man brings with him life, and has given me life which I give to all my brothers and sisters. Our forefathers left us this tent to teach our children, and your life depends upon the secrets of your own breasts. Prepare your magic beads and medicine skins of the tent of life, to cast your beads on the sick and dying men who may be placed before you to restore life. Your magic beads shall pierce the rocks, the spirits who preside over our secret councils shall bless your efforts to restore health and long life. The path of our ancestors teaching us the use of countless herbs and roots growing in this our world will sing the song of enchantment, when each member will offer with gratitude to his teacher, the offerings he may have brought with him to speak and receive long life."

The Grand Master, having finished his speech, several other leading members addressed the meeting, and it seemed remarkable to me to notice with what ease and fluency these Indians spoke. There seemed to be no hesitation, no pause to think of a word, and no stammering in any way. Their words seemed to roll out as fast as the speaker could utter them. The tenor of the speeches was about the same, which was to obey their superiors and use the medicine to be found in the world.

The speeches being now ended, the members of the lodge marched around the tent several times, swinging their medicine bags, and

\*Presumably keeping the tent to the right.



uttering a monotonous chant, while the drum was kept constantly on the tom-tom.

The candidates for admission into the secrets of the lodge, the preparation of whom I shall speak of hereafter, were seated with the women and children along the sides of the tent, while the procession was going around in a sort of a jog-trot dance. Suddenly the procession would come to a halt opposite one of the candidates. The chief medicine man would mutter something to the candidate, and then throw his medicine bag at him, whereupon the candidate would suddenly drop down as though he had been shot. The medicine men then gathered around in a kneeling posture, and blew\* into his ears and mouth, and shook their medicine bag over him, making at the same time a soft rumbling noise. In a short time the candidate would open his eyes, and gradually come to life, as it were, when the march being resumed, the slain man would grasp his medicine bag and follow the procession. The ceremony was repeated until the disposition of all the candidates was completed.

After the ceremony of admitting the candidates is disposed of they begin another, which consists of each medicine man holding a bead in his hand and going around showing it to each of the company. He then falls upon his knees and pretends to swallow it. The medicine men claim that this bead is supernaturally drawn from their bodies and replaced in their medicine bag without having either seen or touched them. After this rite has been gone through the several offerings are taken down and handed to the newly initiated candidates, who, in their turn, distribute them among the medicine men; this division is, however, not done arbitrarily, as the offerings are divided according to provision made in a secret conclave a short time before. This being done, the medicine men again march around the tent at a half trot, and point their medicine bags occasionally at each other, the party pointed at immediately falls down as if struck by lightning, but soon recovers, gets up and follows the crowd. On some occasions they seem as if badly wounded, and unable to rise, in such a case the others gather around him, and, after much ceremony, make a show of extracting a bead from his body. This ceremony to me was very amusing on account of the effect the pointing of a medicine bag had upon one. If it was pointed at the body, the victim suddenly fell down motionless, where he lay as if dead, until the medicine men gathered around him, and by various manipulations brought him to life again. When the medicine bag was pointed at one's knees he would instantly become lame, and would, with great difficulty, hobble after the procession, but after a little while he would gradually get better, and finally resume his wonted jog-trot with the rest.

Most of the women and children were seated around inside of the tent, with the exception of those who were employed in looking on outside, and they were not a few, as there was seemingly no cessation in eating. Some of the women were going to and from the nets which were set in the river for sturgeon. No sooner was a sturgeon caught than it was brought ashore and cooked immediately.

\*For reference to blowing practices for healing (?) purposes, see Ontario Archaeological Report for 1878, p. 141.

There also seemed to be a law that any dog that had the temerity to enter into the sacred tent, was instantly killed, skinned and boiled forthwith. As there were plenty of dogs around, there were quite a few sacrificed.

Several dishes full of dog broth and dog meat, as well as sturgeon, were set before the several wooden images in the tent, which were all divided among the medicine men when the feast was over.

About six o'clock in the evening the ceremony was ended, and I returned to the fort. There was a great deal of juggling in these ceremonies, which, although some of it may be classed as very strange, yet, I had no thought but that the whole performance which seemed so strange was done by sleight of hand.

## MORTUARY CUSTOMS IN BRITISH COLUMBIA.

BY REV. R. W. LARGE, M.D., C.M.

The dead were placed in boxes in a sitting posture, the knees drawn up, and the head pressed down somewhat. These boxes were, by some of the natives (particularly those about Fort Rupert) placed in trees, being laid across branches close to the trunk. Several boxes might be placed in the same tree. About Bella Bella I have seen them laid in niches of the rocks, in almost inaccessible places that had to be reached by ladders. At present the dead about Bella Bella are rolled in blankets, coverlids, and the like, and placed in boxes made after the pattern of the white man's coffin. The dead are mostly placed in grave-houses. These are diminutive buildings containing, besides the remains of the various members of the family, the children's toys, and dishes, clocks, lamps, articles of furniture, and other belongings of the departed. Blankets, dishes, food, etc., are burned at stated intervals near the grave-houses, and the old people believe that the spirits of the departed can utilize the essence, or spiritualizations of these things as soon as the flames have done their work. In some cases large holes are dug in the earth, and covered with loose, board floors, over which grave-houses are built, and bodies are occasionally deposited under the floors, as well as in the structure itself. Instances are known of the blankets and clothing about the dead being removed from time to time, and new material substituted. The Indians here are very jealous regarding the proper care of the dead. Those who watch by the bedside of the dying, and those who wash and lay out the body, besides those who chant the lament for the departed, are all well paid by the friends of the deceased. There may be neglect of the old and chronic invalids during life, but it is imperative that they get a proper burial. Some of the old Indian medicine men claimed to see the spirits of the departed partaking of the food that was being burned near the grave, and it was regarded as a great disgrace to have a medicine man state that he had seen the spirits of a certain man's relatives going about crying for food.

The bodies in time became quite dried. I have been told by one of our Indians here, James Starr, that he procured bodies for the man-eating dance. He secured "special dry" ones, and they were taken into a house where the dance whistles, etc., were kept, and here they were partially smoked. During the dance the man-eater was attended by some old women, who took great care that he

did not partake of more than was good for him. If he tore off a particular large piece it was pulled away from his mouth and secreted by them under one of their blankets. He states, also, that after the dance the man-eater took an emetic of salt water.

### A MUSEUM, OR A MUSEE?

According to the Student's Standard Dictionary a museum is "a building devoted to the collection, arrangement, and preservation of works of nature, art and antiquity, or to the exhibition of rare and instructive objects; also, the collection itself. Originally a temple or sanctuary of the Muses." It is plain from this definition, that the object of a museum is *education*. Of late, the French word *musée* has been introduced as a name for any collection of monstrosities, alive or dead, exhibited in some place where, too often, the other attractions consist of not very high vaudeville performances, and it is not unusual to hear the Provincial Museum referred to by the latter name. There are occasional visitors, too, who express not a little disappointment because they fail to find wax figures, or effigies of any kind representing certain murderers and other criminals, whose names have been, from time to time, before the public.

It is not so very long since one of three young ladies (?) asked in a half whisper where to find "the chamber of horrors."

We shall, perhaps, always have morbid and stupid people to meet—people who regard a museum as a *musée*, and who desire to look only at what, as they themselves would say, is "awfully funny," or "awfully queer," or "awfully" something else, referring at the same time to the contents of the cases as "curiosities," or, more elegantly still, "curios."

If a public museum has no educational value it cannot be said that there is any reason for its existence. It is the duty, therefore, of those who are concerned in the maintenance and management of such an institution to make it all it ought to be, and endeavor to lead in the adoption of new methods, rather than to lag, or to imitating tardily those of other and more progressive institutions of a similar kind.

It is to the national museum that every scientific student's steps should be directed, and he should proceed thither with a well grounded hope that he will find there what he requires, or, failing this, that he will be put in the way of finding it somewhere else.

Here, too, there ought to be every kind of reasonable accommodation for those in search of information, for those who wish to make notes, or to sketch, or to photograph, and special arrangements should be made for the benefit of children. In some progressive cities there are children's museums, that is to say, small typical collections of local flora and fauna, besides instructive material of some other kinds, the character of which necessarily accommodates itself to the situation and circumstances of the town and its locality,

But no matter what kind of museum may be in question, it is imperatively necessary that everything on exhibition should be not only fully, but legibly labelled. Indeed, the label is not infrequently of much more importance than is the specimen to which it is attached. Labels, too, require to be renewed at intervals, not always be-



cause they become dingy, and shabby looking, but for other reasons, e. g., re-classification, and new or additional information; and in every instance they should be not only legible, but tasteful, and not so glaring or conspicuous as to make the collection look patchy.

Small maps and pictures of various kinds may often find place very advantageously in museum cases.

It has been stated that in a live museum there is enough work to keep busy an expert labeller for every twenty thousand specimens. This seems a reasonable estimate, but, of course, much depends on the nature of the collection, and the aim of the curator.

Dust is one of the museum's enemies, and, therefore, nothing should be left undone to keep the floors and walls, as well as the cases, scrupulously clean, and this demands the constant attention of one person for every thousand square feet of glass. Where small collections are concerned the services of the cleaner and labeller may be combined, but the combination is a difficult one to effect. Spasmodic cleaning is only a little better than no cleaning at all.

Many visitors look for a little attention, especially those who come from other cities; and all foreigners. Even, however, when this is not in question, there should be an intelligent attendant to whom reference may be made by enquirers, through whom valuable information may, sometimes, be acquired.

Every possible means should be employed to make visitors feel at ease. This is particularly desirable when people from the country parts are concerned. They are naturally somewhat more constrained in the surroundings than are those who live in towns, and have frequent access to public places. Such visitors should be assured by the attendants, and by all concerned, should opportunity offer, that the institution is public property, that strangers are cordially welcomed, and that there need be no hesitancy in asking for information.

It is quite out of the question to attempt the management of any museum worthy of the name, without facilities for performing numerous mechanical operations, for unless work of this kind is done promptly the place will in time look like anything but what it should. Casts of various kinds have to be made and painted, objects by all sorts need to be repaired, animals mounted, skeletons put together, skulls cleaned, pottery pieced, specimens cleaned, and many other things ought to be done in a room of this kind.

It is impossible to do too much by way of impressing on the public that while the museum is a place in which many pleasant hours may be spent merely in sight-seeing, the main object is an educational one, the purpose of which corresponds to that of a reference library. Here are the things you have read about, and of which you have seen pictures—come and see the things themselves.

Every museum, too, worthy of the name, should institute courses of lectures, or of familiar talks, for the benefit of those who care to attend. Classes from the city schools, accompanied by teachers, should be encouraged to visit the rooms from time to time, but not on Saturdays, as is usually the case when visits of this kind are made at all. Saturday is the young folks' day, in the sense that they should be at liberty to spend it as they please, recreatively. Besides this, if a collection is worth visiting at all, beyond simply being gawked at, it is worth some consideration, some study, and is, there-

fore, as well worth an hour or two's time in a week or a month as is often given to what some speak of irreverently as "educational frills."

## INDIAN GRAVES IN MONROE CO., NEW YORK.

By J. G. D'OLIER.

"Just one and one-half miles southwest of the village of Honeoye Falls, Monroe Co., New York, and twelve and one-half miles due south of Rochester, on Spring Creek, is the site of the Seneca Village of Totiaction. It is two and one-half miles south southwest of the older site of Totiaction (Sonnontonan or La Conception of the Jesuits, also called Father Fremin's Village), which was destroyed by De Nonville in 1687. It is supposed that the village on Spring Creek was settled by the Indians of La Conception after its destruction. It must have been an important place, covering twenty or twenty-five acres. It is a pleasant site, occupying a flat about forty feet above the bed of the creek, where there is a pretty little cascade. Great quantities of relics have been found. Mr. John Dann, the owner, having over twenty-five almost perfect Seneca clay pipes. The site has also been very productive of glass and shell beads, brass rings, crosses, medals and kettles, hundreds of iron hatchets, gun barrels, etc. Gen. John S. Clark says that this village was the western door of the Long House, and the residence of Tegaranhies, hence sometimes called 'Tegaranhies' town.

In the spring of 1898 the writer opened a number of graves, some of which had been opened before, and the relics removed, the richest grave known to have been opened contained the skeleton of a man having a remarkably low forehead, around his neck there was a necklace of 120 bear's teeth, beside him were two pipes, one a Seneca clay, the other a Catlinite, three or four pounds of bullets, and one bar of lead. The graves are on two knolls, one a sandy loam, the other a coarse gravel, underlying the loam and gravel is a stratum of clean white sand about three inches thick, upon which the bodies are laid.

The graves vary in depth from  $2\frac{1}{2}$  to  $6\frac{1}{2}$  feet. The stratum of sand dips lower under the gravel than under the loam, thus necessitating the excavating of from 4 to  $6\frac{1}{2}$  feet of gravel to reach the sand. May not a desire to reach the sand account for the varying depths? A few inches below the surface a layer of charcoal and ashes testifies to the use of fire as a part of the burial ceremonials.

Enclosed with this you will find some correspondence *re* seeds taken from a grave on this site. I am also sending a small quantity of said seeds, and a topographical map with the locality marked upon it.

Regarding the graves opened on Thanksgiving Day, the work was done in a cold, drizzling rain, and the *data* were not accurate enough to write from. The eight or nine graves opened were of a uniform depth, about  $2\frac{1}{2}$  feet, the bodies in the same position, i. e., on left side, hands up to face, and legs doubled up to body, no evidence of fire, and, with the exception of a perfect clay pipe, no relics. One of the skulls showed the wormian bones, as did the one taken from the grave with the seeds.

One of the most interesting features in connection with these burials was the finding of a quantity of raspberry seeds.”\*

In another communication Mr. D'Olier states that there was nearly half a pint, and that they were lying “loose in the grave beside the body, which was in a sitting posture.” What seems most probable is that the man had died after eating an enormous quantity of the fruit in question, and that the seeds, having remained undigested, were found as Mr. D'Olier mentions. It is, indeed, not unlikely that the presence of so large a quantity of undigested and indigestible material in the man's stomach was the cause of death.

### THE ESKIMO A HUNDRED AND FIFTY YEARS AGO.†

RICHMOND FORT, 15th March, 1754.

TO MESSRS. WHITE & ISBESTER,

Commanders-in-Chief of Moose and Albany Forts.

GENTLEMEN,—This comes with the melancholy account of the dismal situation we are in at Richmond Fort, necessity having obliged me to keep two-thirds of our people tenting out and hunting partridges all this winter, there being no partridges to be seen near the fort.

The 21st of November sent Mr. John Stephenson and Mr. George Stephenson and Mr. George Humble, with one man and a boy, to Whale River House to trap foxes and hunt partridges.

The 25th of January they returned home, the time I ordered them to stay being expired, they informed me that three or four nights before they left Whale River House they heard something walk round the house, which to them sounded like a man's foot, it being night they did not think it safe to go out to see what it was, next morning they looked all round the house, but could not distinguish any foot marks from their own, so concluded it to have been a wolf or quicohatch, the next night following it came again, they in the house called out in English and Indian to know who was there, but received no answer.

I having found it necessary to make an addition to Whale River House for the lodgings of the people that will be there with me next summer to attend the whale fishery, had, therefore, concluded to send Mr. Pollexfen with the house carpenter and his mate, Hugh Corston, and two hands to look for timber at Whale River to build the addition to the said house.

The 22nd January sent Mathew Warden and four Indians to Whale River House with bedding, provisions, etc., belonging to Mr.

\*Identified by Mr. G. H. Hicks of the Department of Agriculture, Washington, as either *Rubus villosus*, or *strigosus*.

†This paper, copied by Miss T. Muriel Merrill, *verbatim et literatim*, from the original manuscript, is of quite as much ethnological as of historical interest, affording as it does an excellent picture of the treachery which is so characteristic of Eskimo peoples.

Although the events relate to a period one hundred and fifty years ago, recent missionaries and travellers seem to regard the people in question as being but little better now than then.

Some ethnologists refer to the Eskimo as the proto-aborigines of America, who were driven northwards by the Indians.



Pollexfen, Geo. Clark, the house carpenter, and the other two that were to be at Whale River House, the above Mathew Warden being one of the four that was to be there and act as cook.

When Mr. Stephenson came home, which was on the 25th of this month, he informed me that the boy, Warden, and the Indians, in their way to Whale River (which was by the seaside) did see a man strike out from the main towards Knapp's Island, and took him to be some of the people that were at Whale River House with Mr. Stephenson and his crew in the house, then concluded it to be an Eusquemay.

The 28th in the evening the four men return'd home and inform'd me that they set out from Whale River House that morning for the factory, and in their way home about five or six miles to the northward of Whale River they saw five Eusquemays making towards them, our people being nearer Whale River House than the factory they made the best of their way back towards Whale River House, but the Eusquemays, being much swifter than our people, four of them came up with our people apace, so when our men found they could not get away, made a full stop and stood in a posture of defence, with their guns loaded. When the Eusquemays came near our people they laid down their bows and arrows, calling out Chimo, clapping their breasts and making all the signs of friendship they were able, our people laid down their guns, and did the same, so each party advancing met and embraced each other with signs of joy. Our people returned to Whale River House, and with them four of the Eusquemays. At their arrival at the house they found nobody at home, Mr. Pollexfen and the others being gone hunting. They kept the Eusquemays there near three hours, gave them bread and plumbs, which they eat, and drank some water, but at last making signs that the day was far spent, and that they had a great way to go, would stay no longer. They had not been gone about ten minutes before Mr. Pollexfen and the house carpenter came home, and were just got upon the ice. Mr. Pollexfen and the house carpenter laid down their guns at the house, and Mr. Pollexfen took an iron hoop in his hand, and he, with the house carpenter, went down upon the ice to the Eusquemay and gave them the iron hoop and four partridges, which the house carpenter had killed that day. They seemed extremely well pleased, shaking hands, hugging and clapping their breasts, and making all the signs of friendship they could, calling out Chimo. Mr. Pollexfen would have them back to the house to give them some things that might be of service to them, but they made signs that it was late, and that they would come next day, so struck out to sea for Knapp's Island.

The 1st of February I sent one Englishman and one Indian to Whale River house with some trading goods, and a letter to Mr. Pollexfen with some necessary orders to Mr. Pollexfen to trade or present the said goods as he should find necessary if the Eusquemays should come any more to Whale River House, and to use them with all the kindness he possibly can, and at the same time endeavor to make them understand that there is a great house in Artewenebeck (or St. Atwell's lake) and, if possible, to bring or send some of them to the fort, in the same letter I desired they might be upon their guard, and not go hunting: but keep in and near the house, and if they were under any apprehension of danger on account of the Eusquemays to quit the place and come home. This evening Mr. Pollex-

fen and the boy, Mathew Warden, came here, and brought with them two Eusquemays. I took them into my room, and gave them some bread which they eat heartily, and drank plentifully of water, I then gave them two partridges with the feathers on them; they picked them, eat the gutts, liver, hearts, with the contents therein all raw, I lent them a little kettle in which they boiled the two partridges, and eat them likewise, with some bread, and drank some water, I then gave them each a laced hatt, two hatchetts, some knives, some beads and several necessary things of no great value, of all which they seem'd to be extremely fond and thankful, and made signs to us how they killed the whales, I then let them see some fox skins, and made signs to them that we wanted those things. There was at the same time an Indian man in my room, to him they talk'd, shak'd hands and made great signs of friendship to him, I ordered my boy to give the Indian a fox skin, and tell him to trade it with me to let the Eusquemays see the nature of trade, the Indian acted his part very well, traded the fox skin for knives, and presented each of the Eusquemays with a knife, which they accepted with great signs of joy. Mr. Pollexfen inform'd me that the day after the four first Eusquemays were at Whale River House, there came near fifty, all men, but had nothing to trade, they behaved very civilly, and seem'd much pleased to see our people and the house, they then pointed to the river and made signs how they killed the white whale. Mr. Pollexfen used them with all the civility he could, and presented to an old man, who seem'd to be the Chief of the tribe, viz, One blanket, waste-coat, almost new, a pair of cloth stockings, one worsted cap all his own, and little worse than new, one trapping hatchet, a looking glass, and some other things, they stay'd about three hours, then went for Knapp's Island, except two of them, who stayed near two hours after the others were gone, which are the two that came to the factory with Mr. Pollexfen.

To return to the relation of the behaviour of the two Eusquemays that came here with Mr. Pollexfen, they sat up till after ten that night, then made signs they wanted to sleep, accordingly, I ordered some deer skin coats for them to sleep upon, and, accordingly, they went to sleep upon the guard room floor, and with them Mr. Pollexfen, who was so complaisant to them that he slept between them all night to keep them from fear, for they seem'd to take great notice of him, and seem'd concern'd when he was out of their sight.

Saturday, February 2nd, in the morning, I ordered one of our three pounders to be fired, at the seeing and hearing of which the two Eusquemays were seemingly pleased, and very much surprised. Mr. Pollexfen and one of our people, with the two Eusquemays, set out for Whale River House, the boy, Mathew Warden, being tired, and not able to return with Mr. Pollexfen, continued at the factory to rest himself a day or two till he was able to go to Whale River, he being the cook for the people there, this day, 2nd February, sent some of our people to order all our men from the partridge tents, in the evening some of them came home, and the rest next morning.

Sunday, 3rd, we loaded all our trading guns, got two guns upstairs, one in each flanker facing the sloop, the one a one-pounder and the other a swivel, and placed them to fire out of the windows to clear the sloop if any of the Eusquemays should attempt to do her any damage. About two o'clock this afternoon we saw several

Eusquemays about a mile and a half to the westward of the fort, they no sooner came in sight of the fort than they made a full stop, then drew back behind a point of rocks out of our sight, stay'd there a little, then nine of them advanced towards the fort as far the Road Island, which is about one mile to the westward of the fort, there they stopp'd about one quarter of an hour, hallowing and calling out Chimo, and tossing their coats and waving them over their heads. I, with some of our people, got upon the house, calling out Chimo, Chimo, and waving our hats and caps for them to come to us, which they did, till they came to a little island about a quarter of a mile from the fort, where they stopp'd a little calling out Chimo. We did the same, then they advanced till they came within about 200 yards of the fort, they made a full stop, and laid down some bundles of old coats, boots, shoes, and such like things. I then went out with my gun in one hand and sword in the other, and advanced within about 100 yards of them, they then laid down their bows and arrows, I then laid down my gun, so went up to them with my sword only, when I got almost to them they advanc'd towards me with their knives in their hands, the which as soon as we met they offered to deliver up to me, which I refused, they shook hands with me, hugg'd me, and made all the signs of friendship they were able. I then brought them up to the factory gates, and, being sure all our people were upon guard, I made signs to the Eusquemays to lay down their knives, which they willingly did, I then took them into my room, and gave them some hard bread, which they eat, and then drank some water. I gave them several necessary things, such as hatchets, knives, small hand saws, files, and several other things, all of which they accepted with great joy, offering their coats, boots and such things in exchange. I then let them see some fox skins, and made signs to them that those were what we wanted. I likewise let them see a little piece of whale bone, and made signs that we wanted such as that in exchange for our goods, at the same time made them understand that what I had given them was at their service, and that I would take none of their coats, boots, etc., in exchange. Dinner coming upon the table, I ordered my boy to bring me a bottle of red port, of which I gave every one of the Eusquemays about a quarter of a glass, which they drank, and seem'd to like it much, I then gave every one of them a little of the victuals we had upon the table, which happen'd to be a rump of fresh venison, which pleased them much. after dinner they made signs to go away. I then ordered the doors and gates to be open'd, so they went out and parted with us with all the signs they could possibly make of friendship to us, and we did the same to them.

The Indian that was sent to Whale River the 1st of this month with some trading goods to Mr. Pollexfen returned this evening, and brought me a letter from Mr. Pollexfen informing me that he arrived safe at Whale River House about four o'clock the same evening of that day he went from here with the two Eusquemays, and that they, the two Eusquemays, left him as soon as they came in sight of Knapp's Island, and made towards it, at parting they made signs that they would go with their countrymen to the factory. The Indian above mentioned, in his way home, met the nine Eusquemays riding in two great sledges drawn by six dogs in each sledge, as soon as they see the Indian they drove towards him as swift as if



they had been drawn by Rain Deer, when they got within fifty yards of him they stopp'd, got all off the sledges, and came to the Indian (leaving two men to keep the dogs) they shak'd hands with him, and made all the signs of friendship to him he could desire, he then gave them four knives (which I gave him to present if he should see any Eusquemaw in his way to and from Whale River) with which they were extremely well pleased, so shak'd hands and left him.

Monday, 4th February, eleven Eusquemays came here, I took them into my room, three at a time, used the same as I had done the others that had been here the day before, and they seem'd as well pleased as the former, stay'd near two hours, and went from here at one o'clock in the afternoon. This evening the ship carpenter and another man came here from Whale River House and bro't me a letter from Mr. Pollexfen, in which he tells me that no Eusquemays had been at Whale River House since the first of this month. The carpenter, in his way home not far from the Gulph met the above mentioned eleven Eusquemays, upon sledges, they got off from their sledges, shook hands with him, and the other man made signs of friendship, and left and remounted their sledges, and drove with great swiftness towards Lady Lakes Grove.

Tuesday, 5th, sent Mathew Warden, the company's apprentice, a lad about eighteen years of age, and another man with him to Whale River with a letter and some necessaries for Mr. Pollexfen and the other two men.

Wednesday, the 6th, the Eusquemays being no ways troublesome, and our English provisions being better half expended, necessity obliged me to send some of our people to the partridge tents and, accordingly, sent six hands, this morning two Eusquemays came here, brought a little seals blubber, for which I gave them some knives, beads, etc., with which they were well pleased, I used them with the same civility I had done the others, they staid about an hour, then went away.

Friday, the 8th, the man that went with the boy Warden, last Tuesday to Whale River return'd with a letter from Mr. Pollexfen in which he says there have been no Eusquemays there since the first of this month, but if any more should come he will use them with as much civility as possible, and dispose of the trading goods which I had sent him as frugal as possible, and to the best advantage for the company's interest.

Saturday, 9th, at ten o'clock in the morning, Mr. Pollexfen, the house carpenter, and Hugh Corston came home from Whale River House, and inform'd me that having seen no more Eusquemays at Whale River concluded they would come no more, therefore, being tired with being confined in the house, living upon salt pork, and no exercise, they last Friday went out hunting, and left the boy Warden to cook dinner, and strictly charged him that if any Eusquemays should come, to keep in the house, make the doors and windows fast, and not suffer any of them to get into the house. About four in the evening Mr. Pollexfen return'd from hunting (the others being home a little before him) but to his great surprise he found the house plundered, the poor boy gone, their bedding toss'd all about the house and out of doors, and everything of iron-kind gone, the carpenters' tools, cross-cut and other saws, mauls, hammer, two great open brass kettles, one large copper stew kettle, one iron pot,

broke open a cask in the house containing spikes, nails, hinges, and such like things, all which they took away. In the little trading room was a cask containing several brass and tin trading kettles and tin pots, all which they took away, and rip'd the hinges and handles off my chest I left there last summer and have not yet had an opportunity of getting it home. At six in the evening Mr. Pollexfen set out (in company with Geo. Clark, the house carpenter, and Hugh Corston) for the factory, and arrived here next morning. Amongst the rest of the things taken away by the Eusquemays were three muskets, two pistols, six cutlasses, about one and a half of gunpowder, near ten of shot, and a new fowling peice. This day sent two men to the partridge tents to order the six men home that were sent there Wednesday, the 6th.

Sunday, 10th, our partridge hunters came home, this day gave orders for a watch to be kept night and day in the same manner as is kept on board the company's ships, placed every man in his station that he may know where to go in case of an alarm. We having but nine casks of English provisions, and no likelihood of getting any country do. and now being confined to the house, no person daring to go out to look for any fresh provisions, I am necessitated to put our people to the following allowance, viz., For four men per day, half a piece of pork, one quart of peas, two of flower, and half of plumbs.

Wednesday, 13th, our people having now sufficiently rested themselves, I thought it necessary to try how many men I could muster to go in quest of the Eusquemays to endeavor by force of arms to recover Mathew Warden if I with the council appointed by the company should find it necessary and warrantable to put it in execution, and, accordingly, thirteen of our people sign'd their names to go upon that expedition. All this day and the night following I seriously considered all the consequences that might attend such a dangerous attempt as to send thirteen raw and undisciplined men without proper clothing at this season of the year, having no beaver coats in the factory to make toggys nor mittens, caps, etc. I say to send those men out to the islands in quest of the Eusquemays in the open bay seven or eight miles from the main, and for the most part hazy on account of the Gulphs being open all the winter, and upon those islands not one drop of fresh water to quench their thirst, nor one stick of wood to make a fire, and, perhaps, hundreds of Eusquemays, and if they should conquer our people there would be no more people to guard the company's factory than myself and seven men, which is no more than two to a flanker, so if the Eusquemays should attempt to take the factory they may do it very easy, for if they should lurk about the factory for three or four days, which they may do among the rocks in sight of us where we cannot bring one gun to bear upon them, and they not above twenty yards from the house, for so near stands the factory to the steep bank of the shore and a high hill behind it within 100 yards, and if they should lurk about for the time above mentioned we must surely die for want of rest, and they take the factory, especially if they conquer the above thirteen men, and attack us with their guns, pistols, swords and other instruments of war.

Thursday, 14th, in the morning, I call'd a council and gave my opinion as above, but if in future any Eusquemays should come to

the factory to take two prisoners and put them in irons till they returned to the boy, Warden, so after mature deliberation in council we came to a resolution not to attempt going in quest of the Eusquemays.

There being several things which the Eusquemays had left in and about Whale River house when they plunder'd it, that could not be brought home by Mr. Pollexfen and the two men that were with him at Whale River, particularly 33 pieces of pork, six muskets, which were set up the river for foxes, and several other things, such as bedding, etc. Accordingly Mr. Pollexfen offered his service to go with what number of people I thought necessary to send with him to bring home the above mentioned things (if remaining) from Whale River House. This morning he, with ten men well armed, set out from here for Whale River.

Saturday, 16th, Mr. Pollexfen and his men return'd home from Whale River and brought home the muskets and what other things the Eusquemays had left, they having been there since Mr. Pollexfen left the house and taken away sev'l other things except the pork, and stripp'd the inside of the house of all the iron work they could find, rip'd open Mr. Pollexfen's bed, cutt out the bottom of the bed place and did all the mischief they could except burning the house.

Thursday, 21st, our people having grumbled among themselves about the short allowance, I offered to let ten of them set out this morning for the partridge tents, four to the eastward upon the Main, three to Winter's Mortlake, and three to Elderton's forrest, which is about seven miles to the west southwest of the fort upon the South Main, the four first mentioned went from here sooner than the others and were out of sight before the others set out from the factory. When the latter six men had got about half a mile from the fort one of them came home and inform'd me that they did see several Eusquemays coming towards the fort, I then called the other five men home, placed every man in his station and upon guard, at noon three Eusquemays came in sight, got upon Road Island calling out Chimo, stopp'd some time, then slowly advanced, and stopp'd several times calling out Chimo. We did the same at the fort. At last they came within about 300 yards, then made a full stop, I then sent two of our people to them, with whom they shak'd hands and seemed as innocent as doves, when they came to the gates we conducted them into the house, used them as kindly as we had done others before them, after they had been in the house some time I put two of them in irons, right leg and left both together, then brought before them Mr. Pollexfen and the other two remaining men that were at Whale River House, and made signs to know what was become of the boy, but could learn nothing from them concerning the boy, for they outwardly took no notice of the signs I made them, I then made signs with my sword placed to one of their necks that if the boy was not return'd I would cut off the heads of those two in irons, so then conducted them all three to the outer gate, set the fellow that was not in irons at liberty to go and acquaint his countrymen that I had detain'd his two companions prisoners, and would put them to death if the boy was not return'd, at parting the two in irons seem'd unconcern'd, as did the other, neither party spoke one word, I then ordered the two prisoners to be brought into the guard room, and ordered the people upon watch to use them kindly.



Before I put the two above mention'd men in irons I had them all three in the upper guard room I caused our people to pass several times through the said room by way of the flanker doors changing their dress every time, so to all appearance the Eusquemays had reason to think that we had above 100 men for our people passed so quick that it was impossible to distinguish their faces, the Eusquemays seem'd somewhat surprised at the number of people, but spoke not one word all the time, as our people passed by them, except sometimes Chimo.

At six o'clock in the morning I went downstairs, and was informed by the people upon the watch that the Eusquemays had been very quiet all night, till about five in the morning, when Mr. Humble and one man (who I had ordered to go to the eastward to order home the four men sent yesterday morn to hunt partridges) at their going out with their guns and snowshoes, they, the Eusquemays, changed countenance and looked very sour and began to talk in an angry manner, at last got up to rest their legs, making signs the irons hurt them, they continued standing near an hour at the end of a partition, at the back of which in a corner close to where the Eusquemays stood there were some small arms, unknown by those upon the watch, (as they told me) placed there by some of our people I having order'd all the guns which were design'd for the defence of the lower guard room to be placed in a corner of the said room not much frequented and I myself placed some there accordingly. Mr. Pollexfen, observing the Eusquemays to stand so long, and so close to the end of the partition suspected some arms were there, they held fast by the end board of the partition, and would not stand aside, upon which Mr. Pollexfen himself endeavored to push them away, but could not, the house carpenter then got up and endeavored to get them away, then one of the Eusquemays with a knife which he had concealed in his coat sleeve endeavored to stab the carpenter, upon which our people drew back to get their arms, the Eusquemays then seized two guns, clubbed them and endeavored to kill the people upon the watch, and fought with great resolution and fury, the place being so narrow and so low that our people could not knock them down though desperately wounded. Our people being fearful of the guns going off which the Eusquemays had in their hands, and might by chance kill some of our people, so one of our men shot one of the Eusquemays, I gave orders not to shoot the other, but knock him down if possible, but he, keeping his guard so well and fighting with great rage and fury notwithstanding he was desperately wounded, and the thumb of his right hand cutt off at last was obliged to shoot him also. I ordered their corps to be taken out of the house, and put into our store cellar, there to remain till we came to a resolution how to dispose of them. The same day two families of home Indians came here, they being fearful of the Eusquemays beg'd me to take them into the house, I did so, knowing by experience that they are our friends, the same evening came here our trusty friend Robinson Crusoe (an Indian so called by the English) and brought venison to the quantity of two deer, he is the only best Indian we have here both for provisions and whaleing, and has brought more country provisions to the factory than one-half of all the Indians belonging to this place, the same

evening Mr. Humble, with the people from the partridge tents, came home.

Saturday, 23rd, about 10 o'clock in the morning, near Road Island we saw two Eusquemay dogs with a sledge lying upon the ice, they continued for some time there, then came with the sledge within about 150 yards of the factory, then laid down for near two hours, but upon some of our people being ordered by me to go out and shoot them, they got up and got without gunshot before our men fired, and went towards the Gulph with the great sledge as fast as any two horses ever did in a post chaise. We have great reason to think the Eusquemays are still lurking about the factory island, so are obliged to keep close quarters, and a good watch.

Saturday, 2nd March, the Indians beg'd of me not to keep the corps of the two Eusquemays any longer, nor hang them in chains (as I told the Indians I intended). The Indian we call Robinson Crusoe told me that if our boy should be living and the Eusquemays should see their countrymen hanging in chains, they then in revenge would kill and eat the boy, but as they don't know whether or no their two countrymen are dead or alive, they in time may return the boy (if living) in hopes of having their own two men returned; I then gave the two dead Eusquemays to the Indians, first cutting an ear off each of their heads, and have sent them in a bottle of spirits, which you gentlemen, Chiefs of Moose and Albany Forts, may dispose of them to the Indian Captains of each place or any other you think proper, this day the Indians cut a hole in the ice and put the two dead Eusquemays out of sight.

Wednesday, 13th of March, in the morning, sent two Indian men to the eastward to bring home some things left by our people at the partridge tents; after the Indians had got about six miles from the fort, they see a great number of Eusquemays making towards our island in a common track way from the partridge tents, as soon as they saw the two Indians they drew behind an island, as the Indians supposed, to hide themselves in order to get the Indians into their hands, but the Indians returned back to the fort as fast as possible, and informed me as above, and that they, the number of Eusquemays they saw to be about 150, whether they are those that have been about here or others we know not.

I have now, gentlemen, given you a full account of the woeful situation we are in, and beg one of your sloops may come here as soon as possible to our relief, for should the ship be late this year we must starve to death, for no Indians will come near us, neither to trade, kill whales or bring any provisions. I don't think that I can get above three men to stay here another year, for the provisions we expect from England will not serve above five months. I hope one of you gentlemen, the Chiefs of Moose and Albany Forts, will come here in the sloop to be here when the ship arrives to consult what's best to be done for the company's interest. I have no more to add, only beg your answers as soon as possible, that we may know what we have to expect, so remain, gentlemen,

Your very humble servant,

JNO. PORTS.

## JEAN FRANCAIS ALBERT DU POUGET, MARQUIS DE NADAILLAC.

Born, July 16, 1818; died, Oct. 1, 1904.

[Among those who, during the last half century, have devoted their attention to the study of Primeval Man, few wrote more or better than did the late distinguished Marquis de Nadaillac. The range of his reading was wide, and he was as profoundly interested in the Huron-Iroquois of Ontario, as in the ancient people of Great Britain or of France, and in the cliff Dwellers of Colorado as in the Troglodytes of the Dordogne. For a good many years he has taken a very kindly interest in the archaeological work done in this country.

As a correspondent he was most charming,—quite as willing to give information as he was desirous to receive it,—free from dogmatism and pedantry in the expression of his own opinions, and charitable in combatting those of others.

Some of his largest and most valuable works have been translated into English, German, Italian, and other languages.

The Vicomte de Nadaillac has kindly complied with a request to supply the following notes respecting the life and authorship of his illustrious father, whose work was so well known to many students and general readers in this country.] D. B.

“Jean, Francais, Albert du Pouget, Marquis de Nadaillac was born in London July 16th, 1818. He was the eldest of the children of Sigismond du Pouget, Marquis de Nadaillac, General Inspector de Cavalerie, and of Marie Mitchell.

The house of Pouget has always been a prominent one among the nobility of Guercy and Perigord and can trace its military origin to the days of chivalry which preceded the middle of the eleventh century. About 1467 Pierre du Pouget became Seigneur de Nadaillac. This family has furnished a number of captains, provincial governors, cardinals and bishops.

The Marquis de Nadaillac, who has just died, began his study in Paris and prepared for St. Cyr, but did not enter there. He devoted himself to the study of law, and in 1843 underwent successfully the examination for a license, before the Faculty of Paris. In 1845 he married Mademoiselle Edith Roussel de Courcy by whom he had two sons and one daughter.

The legitimist leanings of the Marquis de Nadaillac, whose infancy was passed in the Tuilleries in close companionship with the Comte de Chambord, prevented him from holding any public office. During the empire, in 1871, Monsieur Thiers appealed to his patriotism and conferred on him the Prefecture des Basses Pyrénées, where a Carlist insurrection gave him much trouble. His tact and energy were largely instrumental in quelling this uprising.

In 1876 he was nominated Prefect of Ludre and Loire, a district where he had passed part of his youth with his grandmother, the Duchesse d'Escars in her Chateau of La Ferriere.

Disqualified, and finally recalled in 1877 by the fall of Marshall MacMahon, he gave himself exclusively to study both in Paris, where he lived during the winter, and at Rougemont in le Vendamois, where he passed his summers.

A piece of polished stone, he one day picked up by chance, while superintending some work, led him to engage in prehistoric research. At the beginning of 1870 appeared his first work on “L'Anciennete de l'Homme.” In 1881 he published two quarto volumes entitled “Les Premiers Hommes et les Temps Pre'historiques.” “L'Amerique Prehistorique,” a large quarto volume published in 1885, met



with great success on both sides of the Atlantic, and was translated into several languages. In 1888 another volume followed on "*Mœurs et Monuments es peuplies prehistoriques.*"

The Marquis de Nadaillac was, up to the time of his death, an assiduous collaborator and correspondent of "*L'Anthropologie*," "*La Nature*," "*La Revue des Materiaux de l'histoire primitive et naturelle de l'homme.*" He wrote also in "*La Science Catholique*," "*La Deutsche Revue*," "*La Ravista Nacional*," etc.

Prehistoric questions concerning Europe and America were first but not alone in his mind, *La Depopulation de la France par l'affaiblissement progresif de la natalite*, *La mouvement de la Population du Globe*, *Les Expeditions polaires*, *Le Developpement de L'Amerique*, *Les Mines d'on du Yucon*, *Les Colonies Anglaises*, *L'Afrique*, *Le Negus Menelik*, *Les Chinois*, *Les Japonais*, and many other subjects were treated by him in different journals.

These numerous works opened to him the doors of L'Institut; he was elected in 1884 correspondent of L'Academie des Inscriptions et Belles Lettres. Foreign academies honored him by making him an associate or corresponding member, as for instance those of Madrid, Turin and Beileum. He occupied a prominent place in many learned societies in Europe and America, of which a list is appended. numerous societies did him the honor to make him Vice-President or President of sections. He took part in the committee of organization of the sections of Ancient Art and Prehistoric Sciences at the Universal Expositions of 1878 and 1889.

The Marquis de Nadaillac was President of the Council of a mutual life assurance company *La Fraternelle Parisienne*, which in 1902 celebrated the fiftieth anniversary of his admission to the council by hanging his portrait in the council chamber.

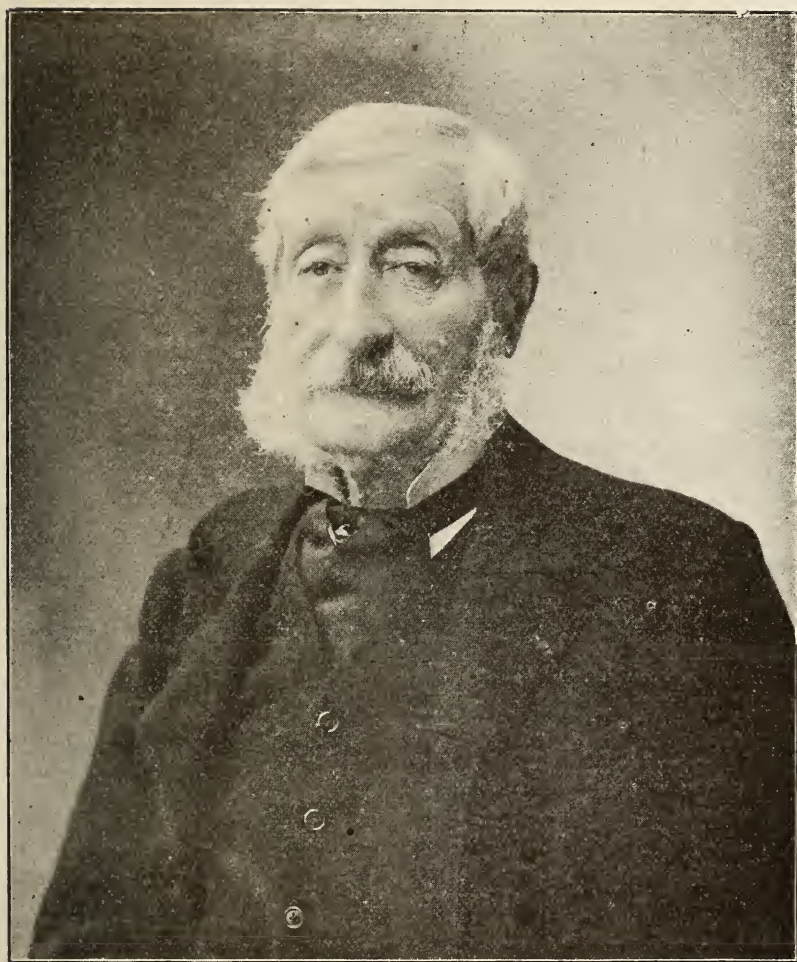
Up to the end of his life he preserved intact his faculties and fine intelligence. The day before the evening of his death he finished an article on Japan which "*le Correspondant*" published on October 25th. He had also undertaken a great work on Jean XXII. and Cardinal du Pouget Legate of that pope, in Upper Italy.

The death of his daughter, the Countesse de Florian, which took place on the seventeenth of last August, proved a shock from which he never recovered. He passed quietly away October 1st, while sleeping in his arm-chair.

According to his wish he was buried at La Ferriere in Touraine. My father died, as he had lived, a christian."

#### LEARNED SOCIETIES OF WHICH HE WAS A MEMBER, AND THE DATE OF HIS ADMISSION THERETO.

- 1862, Member of the Archæological Society of Vendamois.
- 1865, Member of the (?) Society
- 1869, Member of the Anthropological Society of Paris.
- 1869, Member of the French Archæological Society.
- 1872, Member of the Ramond Society.
- 1873, Member of the Societe Polymathique du Marbitran.
- 1879, Member of the Scientific Society of Brussels.
- 1879, Member of the Geographical Society of Paris.
- 1883, Honorary member of Anthropological Society of Washington.



JEAN FRANCAIS ALBERT DU POUGET, MARQUIS DE NADAILLAC.

1884, Corresponding member of Brussels Anthropological Society.

1884, Corresponding member of Numismatic and Antiquarian Society of Philadelphia.

1884, Corresponding Member of the Academy of Inscriptions and Belles Lettres.

1885, Member of Science Society.

1885, Member of Academy of Natural Sciences of Davenport.

1886, Foreign Associate of American Philosophical Society.

1888, Honorary Foreign Member of Archæological Society of Belgium.

1888, Foreign Associate Royal Academy of Belgium.

1888, Member of the Bibliographic Society.

1889, Correspondent of the Royal Academy of Sciences of Madrid.

1889, Member of the Council of the Historical Society of France.

1889, Member of the Anthropological Institute of Great Britain and Ireland.

1889, Member of the American Society of France.

1890, Correspondent of Royal Academy of Science of Turin; Member of Committee of French Society for Advancement of Science.

1891, Member of the Society of Northern Antiquarians; Catholic Society of Political and Social Economy; Honorary Member of Archæological and Historical Federation of Belgium.

1892, Member of American Academy of Political and Social Science.

1895, Fellow of Anthropological Society of Great Britain and Ireland; Member of Society of Americanists.

#### COMMISSIONS AND COMMITTEES IN WHICH HE TOOK PART.

1878, Member of the Commission of Ancient Art at the Universal Exposition of Paris.

1885, President of Section of Natural Sciences at the 2nd Congress of Catholics.

1886, Vice-President of the International Medical Congress at Washington.

1888, Member of the Committee of Organization of the Universal Exposition. Retrospective of Work and Anthropological Sciences of Paris: 1889; Vice-President of International Congress of Anthropology, New York; Vice-President of the International Congress of Catholics and President of the Section of Anthropological Sciences of the Congress; Member of the Committee of Organization of the International Congress of Anthropology and Prehistoric Archæology at Paris.

1889, President of the Section of Anthropological, Ethnographic and Linguistic Sciences at the Congress of Geographic Sciences of Paris; Member of Committee of Organization of Ethnographic Sciences.

1890, Vice-President of Committee of Organization of Congress of Americanists and Vice-President of Congress.

1891, Member of Committee of Organization of International Congress of Anthropology, and Archæology; Vice-President of Scientific Catholic Congress at Paris, and President of Section of



Anthropology; Member of Committee of Fourth Centenary of Discovery of America.

1892, Member of Council of Congress of Religions at Chicago.

1893, Member of Committee of Patronage of the Catholic Institute of Paris.

1900, Member Charged with Organization of the Congress during Universal Exposition of Paris in 1900.

#### CORRECTION.

For facial, line 7, page 92, in last year's report, read cephalic.

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Readers who may have, without wishing to keep, copies of the reports for from 1886-7 to 1893 will confer a favor by returning them to the curator, who will be glad to pay postage.



Annual  
Archæological Report  
1905

BEING PART OF  
Appendix to the  
Report of The Minister of Education  
Ontario

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



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1906





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## CONTENTS.

	PAGE
Presentation .....	5
Additions to the Museum .....	7
Notes on Some Specimens .....	10
Bone and Horn Harpoon Heads of the Ontario Indians.....	33
European Contact and the Introduction of Disease among the Indians.....	59
John McLean and Fr. Morice's "History of the Northern Interior of British Columbia".....	65
The Sword and Belt of Orion.....	68
Ethnology of Canada and Newfoundland.....	71
I. Historical Account. By Cyrus Thomas.....	71
II. Physical Types of the Indians of Canada. By Franz Boas .....	84
III. The Indian Languages of Canada. By Franz Boas.....	88
IV. Ethnographic.—1. The Eskimo. By Franz Boas.....	107
2. The Beothuks of Newfoundland. By Alexander F. Chamberlain	117
3. Indians of the Eastern Provinces of Canada. By Alexander F. Chamberlain .....	122
4. Central Algonkin. By Wm. Jones.....	136
5. The Iroquois. By David Boyle.....	146
Indian Music. By A. T. Cringan, Mus.B.....	158
6. The Blackfoot Indians. By Clark Wissler.....	162
7. The Kootenay Indians. By Alexander F. Chamberlain.....	178
8. The Canadian Denes. By Rev. A. G. Morrice, O.M.I.....	187
9. The Salish Tribes of the Interior of British Columbia. By Franz Boas.....	219
10. The Salish Tribes of the Coast and Lower Fraser Delta. By Chas. Hill-Tout.....	225
11. The Tribes of the North Pacific Coast. By Franz Boas.....	235





## PRESENTATION.

THE HONORABLE R. A. PYNE, M.D.,  
Minister of Education, Toronto.

SIR,—In presenting you with the accompanying Archæological Report for 1905, permit me to direct your attention to the fact that although the list of additions to the museum is considerably smaller than during any other year since its establishment, this is not indicative of any diminution in interest on the part of the public. It arises rather from the facts that press of office work during the last twelve months has prevented me from doing very much in the field, and also that many of the most intelligent collectors throughout the province have already, and very generously, presented to us the results of their work. We can scarcely expect much longer to receive many such extensive and valuable gifts as have come to us from Lieut.-Col. George E. Laidlaw, Dr. T. W. Beeman, Mr. W. J. Wintemberg, Mr. F. W. Waugh, Rev. Dr. John Maclean, Dr. W. L. T. Addison, Messrs. W. and D. Melville, Mr. Cyrenius Bearss, Mr. James Dickson, D.L.S., Dr. S. H. Collins, Lawrenceburg, Ind.; Dr. T. E. Craig, Lawrenceburg, Ind.; Dr. G. S. Ramsay, Mr. A. F. Hunter, M.A., Mr. T. F. Milne, Messrs. A. and R. Lougheed, Mr. Angus Buie, Mr. James S. Cairnduff, Mr. Hugh Nicol, Mr. Clarence B. Moore, Mrs. John Currie, Mr. James Dwyer, Mr. Frederick Birch, Mr. Frederick W. Storry, Mr. W. G. Wright, Rev. Dr. Annand, Mr. R. D. Darbishire, Manchester, England, and Rev. R. Ashington Bullen, F.R.S., Woking, Eng., although we have yet reason to anticipate the reception of several valuable personal contributions.

With the additional assistance you have provided for clerical and other work in the museum, the archæological curator will be at liberty to do more by way of research in the field than has been possible for some years.

The present report contains a number of excellent papers from ethnologists who have made special studies of the various peoples in British America, and as, with your consent, a copy of the report will be presented to each of the delegates attending the International Congress of Americanists in the city of Quebec next September, such a knowledge of the Canadian aborigines will thus be presented as has not hitherto been available, and the subject is one regarding which there has always existed much confusion of ideas, and not a little general haziness.

An apology is due to readers for the late appearance of this report. The copy was in the hands of the King's Printer last Dec., but the proof began to come in only this spring, just at our busiest time. Not only did this prevent us from making arrangements affecting our field-work, but it necessitated the writing of numerous letters to correspondents inquiring about why their copies had not been received.

I have the honor to be,  
Yours respectfully,  
DAVID BOYLE.

PROVINCIAL MUSEUM, Feb. 7, 1906.



## ADDITIONS TO THE MUSEUM.

---

- 27,024.—Red (and somewhat imperfect) argillite gouge, six inches long and chamfered on two back corners. Head's farm, Chaffey township, Muskoka. Mr. Fred. Jarrat, Huntsville.
- 27,025.—Bird amulet, imperfect, bears evidence of secondary work after breakage. Lowell Robinson, north half of northeast quarter of section 4, township of Roxand, Eaton county, Mich. C. V. Fuller, Grand Ledge, Mich.
- 27,026.—4 bone heads. Walker farm, Brantford township. W. M. Dick, Brantford.
- 27,027.—6 red stone beads. Walker farm, Brantford township. W. M. Dick, Brantford.
- 27,028.—14 glass beads. Walker farm, Brantford township. W. M. Dick, Brantford.
- 27,029.—Bits of skin and bark (worked). Grave on Walker farm, Brantford township, Brant county. W. M. Dick, Brantford.
- 27,030.—Very old black dance mask (Seneca) with crooked nose, bent to the right. Tin plates, with three-cornered holes, now placed over eye cavities. Mouth very large, with only small circular opening. Jacob Hess, Six Nations, Ont.
- 27,031.—Red dance mask, eagle-like nose, small mouth, retracted lips, showing teeth. Jacob Hess, Six Nations, Ont.
- 27,032.—Red mask, vulture-like nose, large mouth, and enormously projecting lips. Jacob Hess, Six Nations, Ont.
- 27,033.—Flute, cedar—native make (Seneca) six holes. Jacob Hess, Six Nations, Ont.
- 27,034.—One pair of leggings, beaded. Austin Bill, Saw-gaw-wis, Six Nations, Ont.
- 27,035.—One big skin coat, fringed. Austin Bill, Six Nations, Ont.
- 27,036.—One beaded belt. Austin Bill, Six Nations, Ont.
- 27,037.—One long beaded pouch, worked with porcupine quills. Austin Bill, Six Nations, Ont.
- 27,038.—String of beads and cows' teeth. Austin Bill, Six Nations, Ont.
- 27,039.—Old bow, bone-mounted at the ends. Austin Bill, Six Nations, Ont.
- 27,040.—Beaded head dress. Austin Bill, Six Nations, Ont.
- 27,041.—Woman's rattle with ermine skin and feathers. Austin Bill, Six Nations, Ont.
- 27,042-3.—Two stone-headed clubs. Austin Bill, Six Nations, Ont.
- 27,044.—One small wooden club. Austin Bill, Six Nations, Ont.
- 27,045.—One bone knife. Austin Bill, Six Nations, Ont.
- 27,046.—One bone-headed arrow. Austin Bill, Six Nations, Ont.
- 27,047.—One bone and steel scraper. Austin Bill, Six Nations, Ont.
- 27,048.—Iron tomahawk. Austin Bill, Six Nations, Ont.
- 27,049.—Stone pipe (recent). Austin Bill, Six Nations, Ont.
- 27,050.—Iron spiked war club. Austin Bill, Six Nations, Ont.
- 27,051-2.—Two pairs of snow shoes. Austin Bill, Six Nations, Ont.
- 27,053.—Small beaded and fringed pouch. Austin Bill, Six Nations.



- 27,054.—One medium-sized, beaded and fringed pouch. Austin Bill, Saw-gaw-wis, Six Nations.
- 27,055.—Bird amulet, nearly perfect, 7 inches long, River St. Lawrence shore near Mallorytown. Dr. T. A. Beeman.
- 27,056.—Pendant (Huronian slate) near Mallorytown. Dr. T. W. Beeman.
- 27,057.—Small stone gouge (Rideau Lake, Squaw Point) Lanark Co., Ont., North Elmsley township. Dr. T. W. Beeman.
- 27,058.—Rough gouge, much weathered, Squaw Point, Rideau Lake, North Elmsley township, Lanark county, Ont. Dr. T. W. Beeman.
- 27,059.—Chert arrowhead, peculiar longitudinal flaking. Dr. T. W. Beeman.
- 27,060.—Obsidian arrowhead (small), Arizona. Dr. T. W. Beeman.
- 27,061.—Small and roughly made axe, locality not known (probably near Elora.) W. C. Thomson, Toronto.
- 27,062.—Palæolith, Thennes, Thezy, Somme Valley, France. Sir John Evans, Aug. 20, 1897 (mislaidd and found Aug. 3, 1905).
- 27,063-4.—Arrow heads, peat bog near Lough Foyle, Ireland. Collected by M. J. Thompson, presented by Miss Margaret Thompson, May 1, 1904 (per Rev. S. Dempster).
- 27,065.—Unfinished Huronian slate axe. Lot 19, con. 3, Blenheim township. W. J. Wintemberg.
- 27,066.—Huronian slate, large chip, worked. Lot 19, con. 13, Blenheim township, Oxford county, Ont. W. J. Wintemberg, Toronto.
- 27,067.—Valve of large unio shell, much worn as if it had been used as a polisher. Lot 9, con. 3, Blenheim township. W. J. Wintemberg.
- 27,068.—Piece of meteoric (?) iron. Elliott village-site. Dumfries township, Waterloo. W. J. Wintemberg.
- 27,069.—Model of Cahokia Mound, near E. St. Louis, Illinois, scale 1 inch equal to 100 ft. Gift of Dr. C. A. Peterson, President Missouri Historical Society, St. Louis, Mo.
- 27,070.—Model of Cahokia Mound as it appears to-day. Dr. C. A. Peterson, St. Louis, Mo.
- 27,071.—Clay vessel almost perfect, 6 inches high, Orillia. Mr. J. H. Willey, Orillia. This is in an unusually good condition.
- 27,072.—Roughly made stone disc, Ryerson farm, South Orillia. Per J. H. Hammond, Orillia.
- 27,073.—Stone disc, unfinished, two and a quarter inches in diameter. Ryerson farm, South Orillia. Per J. H. Hammond.
- 27,074.—Stone disc, thick and not well made, inch and a half in diameter. Ryerson farm, South Orillia.
- 27,075.—Clay pipe, human face, ears pierced as if for rings, chin long and pointed, stem broken. It is peculiarly attached to the head, as may be seen by reference to the illustration, fig. 22. W. O. Mercer.
- 27,076.—Clay pipe, widely flared lips. The bowl hole is half an inch in diameter, diameter of rim two and one-eighth inches; under side of the flared lip very neatly lined diagonally in a pattern. Southwest quarter of lot —, con. 1, South Orillia. Hugh Johnston, Orillia, per J. H. Hammond.

- 27,077.—Small plain clay pipe, short, sharply tapering stem, south-east part of west half of lot 4, con. 8, North Orillia. Isaac Reid, Orillia, per J. H. Hammond.
- 27,078.—Very small clay pipe, stem broken, bowl ornamented with three horizontal bands, under which there are seven circular depressions neatly made. Southwest part west half lot 4, con. 6, North Orillia. Wesley Brennan, Orillia, per J. H. Hammond.
- 27,079.—Fragment of pottery very well made, and accurately ornamented, west half lot w. 1/2 4 con. 6, N Orillia. Wesley Brennan, Orillia, Ont., per J. H. Hammond.
- 27,080.—Human face pipe bowl, perforated ears, prominent features of face destroyed. Lot 209, Mississaga Street, South Orillia, near town. Daniel Bowie, Orillia.
- 27,081.—Large inverted cone-shaped clay pipe. Southwest half of north half of lot 6, con. 2, South Orillia.
- 27,082.—Piece of hematite, used as paint. Shore of Lake St. John, Rama.
- 27,083.—Human skull, lot 6, North Mississaga Street, town of Orillia. J. H. Hammond, Orillia.
- 27,084.—Two small beads of clay found among gravel. W. G. Richardson, John Street, Orillia.
- 27,085.—Single specimen of black wampum (mowhackee) near Mt. Slaven school house. J. H. Hammond, Orillia.
- 27,086.—Small arrow head, Coleman township.
- 27,087.—Small and very well made stone axe, five and a half inches long. Lot 6, con. 1, South Orillia. John R. Harvey, Orillia.
- 27,088.—Clay pipe, imperfect, ornamented with three large slots at nearly equal distances. J. H. Hammond.
- 27,089.—Piece of limestone having at one end what seems to be a deeply-cut imitation of a square, bastioned fort. It was found by Mr. John Cuppage, of Orillia, many years ago, on the bank of the Saskatchewan river at a place he thinks is now known as Oxbow.
- 27,090.—Arrowhead or knife, found near confluence of Lake Lady Evelyn waters with Montreal River in 1890, by Mr. James Mowatt, per Mr. Wm. Brodie.
- 27,091.—Buffalo robe, fig. 40, bearing numerous pictographs in black, red and green, including two stories. Bought by E. M. Chadwick, Esq., from a daughter-in-law of John S. Baxter, who was in the service of Catlin during the latter's travels among the Indians (1832-1840). E. M. Chadwick, Toronto.
- 27,092.—Fragment of pottery, incised lines on both sides, southwest half lot 3, con. 2, South Orillia. Leighton Hammond, Orillia.
- 27,093.—Seems to be a child's attempt at making a clay pipe. Only the outside form has been moulded. Southeast quarter lot 2, con. 5, North Orillia. Leighton Hammond.
- 27,094-5.—Two bone "chippers." These are supposed to be examples of the tools employed by the Mandans in the flaking of flints. E. R. Steinbrueck, Mandan, N.D. (Exchange).
- 27,096.—Bone knife-handle. This is made from a piece of rib (buffalo's probably), and has at each end and on the edge an incision about three-eighths of an inch deep, apparently made to receive a short thin blade, about two inches long. E. R. Steinbrueck, Mandan, N.D. (Exchange).

- 27,097.—Bone arrow-straightener or gouge, eight and three-eighths inches long, rib. One hole is perfect, and the bone is broken at one end where there has been another hole. E. R. Steinbrueck, Mandan, N.D. (Exchange).
- 27,098.—Hide-scraper (?) seven and a half inches long, and three inches wide, made from a piece of Buffalo skull and horn firmly attached, naturally. E. R. Steinbrueck, Mandan, N. D. (Exchange).
- 27,099.—Hide-scraper (?) six and three-fourths inches long and four and a half inches wide, made from the shoulder blade of a buffalo, lower third. E. R. Steinbrueck, Mandan, N. D. (Exchange).
- 27,100.—Bone hoe made from whole shoulder blade of buffalo, cutting edge broken, twelve and a half inches long and five and a half inches wide at lower end. E. R. Steinbrueck, Mandan, N.D. (Exchange).
- The last three preceding specimens are entered in accordance with the beliefs of the people where the specimens were found. The ascribed uses may be correct, but notwithstanding some differences, mainly in size, there does not seem to be any reason why the implements were not employed for both purposes, or for either purpose. A sharpened hoe would make an excellent scraper, and even a dull scraper would make a good hoe, whether attached to a handle, or held directly in the hand.
- 27,101-50.—Fifty typical fragments of pottery, mostly bearing string impression patterns, from North Dakota. E. R. Steinbrueck, Mandan, N.D. (Exchange).
- 27,151.—Waterworm or weathered stone, nine inches long by four and a half wide, and resembling an axe or hammer of unusual form, found near Port Dover. Geo. A. Waterbury, Selkirk, Ont. See p. 26, present report.
- 27,152-5.—Four flints found near Niagara Falls, Welland county, Ontario. William Poole, Toronto.

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## NOTES ON SOME SPECIMENS.

### FLINTS.

To Mr. Wm. Welsh of Amberley we are indebted for the very fine flint specimen of which figure 1 is a drawing. It was found by him on lot 18, concession A, Huron township, county of Bruce, a locality from which much might be very naturally expected, but which has scarcely produced anything, if the Museum cases are taken in evidence. Figure 1 is as nearly symmetrical as it may be possible even to imagine work of this kind to be, on such material. Exactly four inches long, it seems too big for use with a bow, and was more probably employed as a spear, and still more likely as a knife—one for either scalping or skinning, or for both, as the two operations differ only in degree.

It is this kind of implement that should be known as a "skinning stone," yet all our farmer friends, and many others, insist on applying this term to celts, or stone axes, some of which are too unwieldy,



some quite too small, and all incapable of taking an edge sharp enough for such a purpose. A single flint or chert flake, however small, if only it could be held between the thumb and finger, would be immensely superior, by way of cutting adherences between hide and flesh, to any celt-like tool of softer stone.

Perhaps the most northerly Ontario aboriginal relic in the Museum is the one of which figure 2 is a drawing. It is five inches and a quarter long, well formed, and, though neckless, the lower edge is

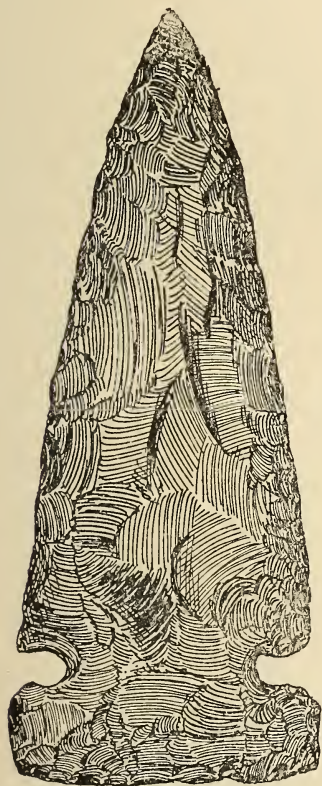


Fig. 1. (19801). Full size.

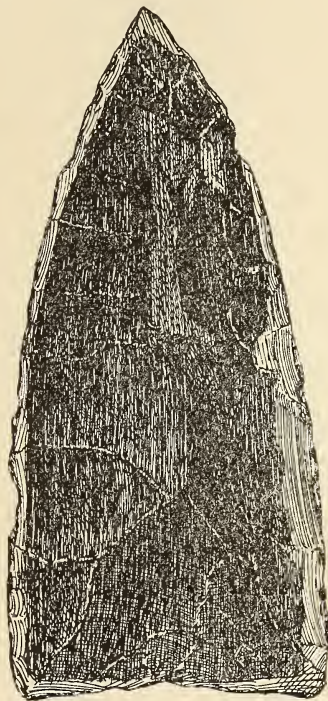


Fig. 2 (19830). Two-thirds size.

thinned just as the others are, as if the intention was to wedge it tightly into a cleft handle. The tool is, however, large enough to be used in doing various kinds of work when held directly in the hand. As a fish-cleaner (if fish were ever so treated when this knife was made) it might have been used with good effect. It is thoroughly weathered to a dirty white, stained with what looks like iron rust, on the side not shown, and as the weathering extends a little over the side as well, it has apparently lain on the surface for a very long time.

We procured this specimen from Mr. Aubrey White, Deputy Minister of Crown Lands, who brought it from Lake Temagami, Nipissing District.

The original of figure 3 is peculiar in shape as well as in the way it has been flaked. Two large chips—one on each side—have been struck from the lower end upwards, leaving well-marked hollows, from the base of which the curved barbs extend.

Found near Strathroy, by Mr. Joseph Stewart.

Many curiously formed "flints" have been found in the County of Middlesex. Figure 4 shows what one of these is like. It may have been a saw, or a knife, but scarcely an arrow. It was picked up on or near the Old Fort—the Shaw Wood estate, a few miles from the city of London.



Fig. 3 (19800). Full size.



Fig. 4 (25410). Full size.

#### CLAY PIPES.

For simplicity, it would not be easy to find any equal to figure 5 among clay pipes. This specimen, judging from the appearance of the hole in the bowl, seems to have been moulded on the end of a little finger. A single line badly made, a little below the lip, shows almost the only decorative effort. It was found near Eglinton, a short distance from Toronto.

Nothing more ornate in clay has come into our possession than the pipe-head shown here (figure 6). Although the specimen is imperfect, enough remains to show that an ancient artist once lived in

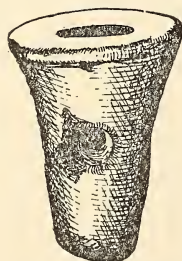


Fig. 5 (7303). Half dia.



Fig. 6. Full size.

the township of Bexley, not very far from where a much more recent artist has produced excellent articles of original design in wood.

Laidlaw collection.

Figure 7 is from a drawing of an excellent cast, the original of which belongs to Mr. Henry Smith. It was found in the north of the township of Wilmot, in Waterloo county. It is very gracefully formed, and quite destitute of ornamentation, with the exception of the slight curvature on the lip.

One of the most slenderly and otherwise gracefully formed clay pipes in the Museum is that which is here figured (figure 8). It is peculiar also in the markings that form the pattern on the under side

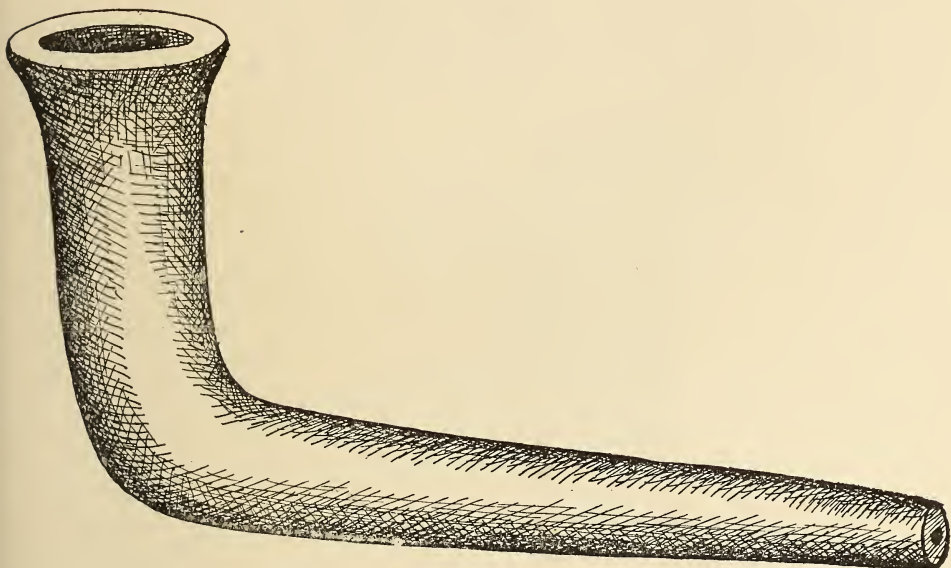


Fig. 7 (16461). Full size.

of the flared lip of the bowl. The design formed by these is quite different from any other pottery, in our collection, and the incised lines are made with much more accuracy than usual.

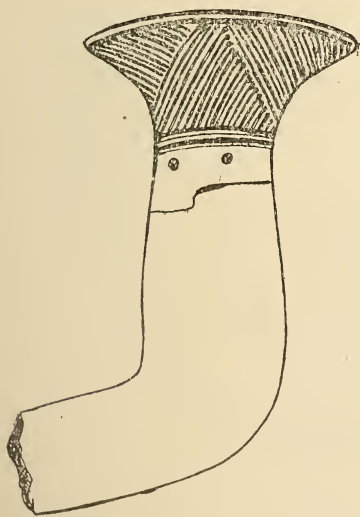


Fig. 8 (27076). Two-thirds dia.

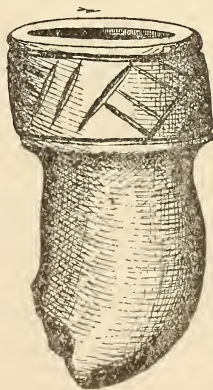


Fig. 9 (17126). Half dia.

This pipe was found in the township of South Orillia, on the farm of Mr. Hugh Johnston, by whom it was presented to the Museum, by courtesy of Mr. J. Hugh Hammond, of the town of Orillia.



The ancient home of the Hurons continues to give up some of its relics. Miss Susie Nelson contributes a boldly formed clay pipe-bowl found in Fair Valley, Medonte township. The heavy collar that forms the rim is strongly incised with a plain pattern of straight lines, very roughly made, as, indeed, is every part of the bowl. (Figure 9.)

From lot 23, concession 1, the farm of Mr. A. Ferguson, in Fenelon township, comes to us, in the Laidlaw collection, the somewhat



Fig. 10 (22950). Full size.

oddly shaped pipe. (Figure 10.) It is quite flat on the right and left sides, as well as on the front side, and base—the upper side being slightly rounded, and this pattern, including the arrangement of the decorative lines, is something quite uncommon. The stem is nearly as long as when made.

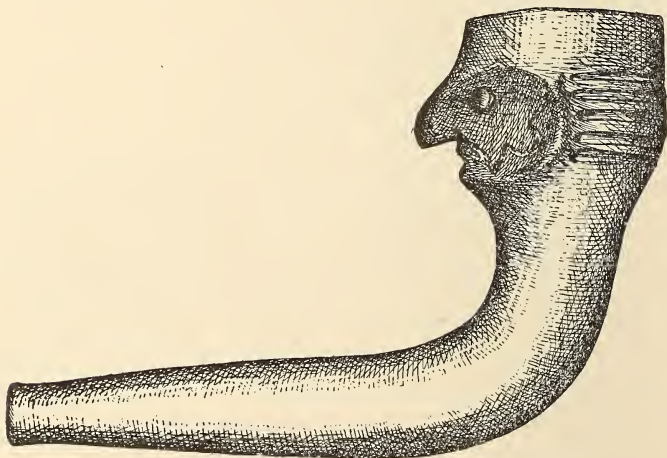


Fig. 11 (25552). Five-eighths dia.

Although the proofs are not so plain on this pipe as on the one figured by 22 that the face portion is meant to represent a dance-mask, yet some of its characteristics point this way. From the base of the nose to the back of the face the cheeks are quite flat; the eyes are prominences, not depressions; what may stand for ears are slightly

perforated, and slightly depressed, irregularly waved lines cross both cheeks. The prominent nose is also suggestive of a mask. This clay pipe is absolutely without a flaw, except where worn by being held in the teeth.

Of the numerous clay pipes found a few years ago by Mr. Dick on the Walker farm, Brantford township, the one shown by means of figure 12 is somewhat odd, as the maker of it was at some pains to show the teeth in the animal head, which, looked at from the front,

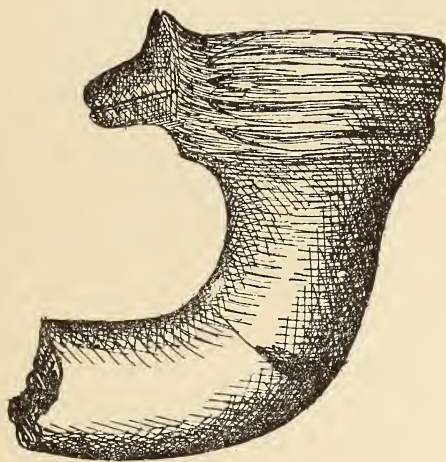


Fig. 12 (25549). Full size.

closely resembles that of a bat. The clay does not appear to be tempered at all, and the pipe, both inside and outside, is glossy black, probably the result of greasing and holding over a fire, as is said to have been the method employed to produce this effect.

From the Huron country comes the pipe, a full-sized picture of which is shown by figure 13. Without the complete head, it is impossible to be sure whether the creature imitated was a mammal or a

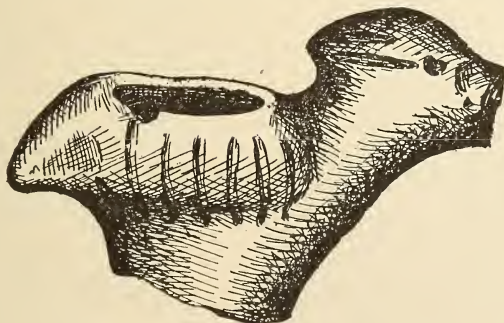


Fig. 13 (17132). Full size.

bird, but probably the latter—the well-marked crest suggesting the partridge or ruffed grouse. It was found on the farm of Mr. Brown, near Vesey, in Tay township, and was presented to us per Mr. T. F. Milne, along with a large number of other specimens, forming the Milne collection.

Somewhat similar in style to the former specimen (figure 13) is the one shown here, but the bird intended in the latter case was clearly some bird of prey. This is the only attempt I have ever seen to model

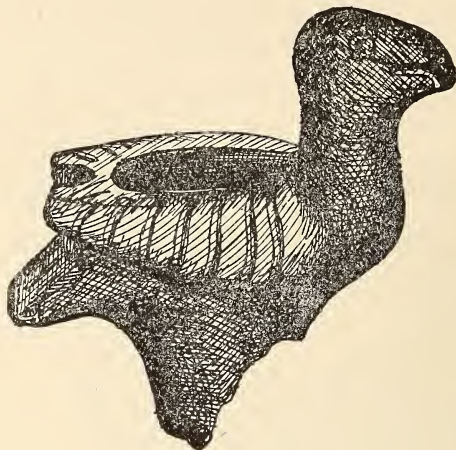


Fig. 14 (26944). Full size.

the wings in strong relief. In figure 14 the ends of both are broken. There has been a hole bored near the tips of these. Wilbert Greer, lot 2, concession 5, Orillia township.

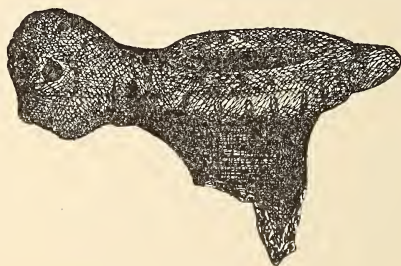


Fig. 15. Two-thirds size.

Another form of bird pipe from the Laidlaw collection is shown by figure 15. It came from near Bolsover in Eldon township, where it was found by Mr. James McGirr.

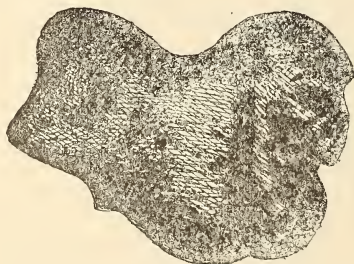


Fig. 16. Full size.



Fig. 17. Full size.

Figure 16 represents all that is left of a two-faced pipe. The one shown in the cut to the reader's right is evidently meant to stand for



a human face, but the other is almost as certainly meant to imitate the face of an owl. Figure 17 gives a front view of the former. Bexley township, Victoria county. Laidlaw collection.

Figure 18 is a picture of a wolf, fox, or dog head, from the bowl rim of a clay pipe, and is shown here mainly on account of its large size for such a purpose. The fracture at the neck gives this specimen,

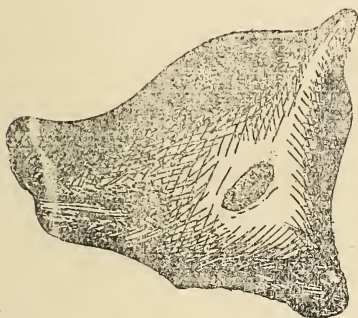


Fig. 18 (2600). Full size.



Fig. 19 (17126). Half dia.

as here drawn, an appearance of symmetry it does not possess. The lower, shaded oval simply marks an ornamental depression. It was found on the Portage road, Eldon township, by Mr. James Laidlaw, and forms part of the Laidlaw collection. It is much larger and heavier than is usual as a pipe ornament.

As the pipe-head illustrated here (figure 19) possesses some rather unusual features, it is unfortunate to find it so much mutilated. The nose and ears have been very prominent, the depressions, representing the jaws, unusually deep, and the dots outlining the jaws quite peculiar.



Fig. 20 (9807). Full size.

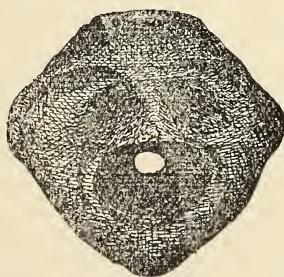


Fig. 21 (26217). Two-thirds dia.

Its last owner must have valued it, for after the original stem was broken, he bored a hole close under the chin for the insertion of a wooden substitute. This pipe was found on the farm of Mr. Brown, near Vasey, Tay township, and is part of the collection presented to the Museum by Mr. T. F. Milne.

This somewhat pretty little pipe (figure 20) seems to be suggestive of the white man as well as of the Indian, perhaps of the former because it is not only made of clay which was burned white, but the

accuracy of the workmanship is such as to attract attention. The brimmed hat, too, leads one's thoughts along the same line. A full-face view of this pipe gives a much better idea of the style and finish of it than one gets from a side view, as in the cut. The ears have been pierced by a very fine tool.

From Mr. W. G. Wright, Collingwood.

In figure 21 there is a strong resemblance to another pipe (6,864) which was described and figured in a former report. Both are from the same township, Nottawasaga, the seat of the Tobacco Nation. For the one figured here we are indebted to Mr. Frederick Storry of lot 12, concession 7, in the township named.

The conceit of making the open mouth to form a bowl is as odd as it is rare. We have no record of any such pipe from any other part of America. One of stone on similar lines is described elsewhere.

There are several peculiarities about the pipe illustrated by diagram 22. Looked at full-face, one of the deeply impressed eyes is very much higher than the other, and of all the clay pipes we have, this one shows the most clearly marked attempt to bring out the high



Fig. 22 (27075). Full size.

cheek-bones and oval shape, which are so characteristic of so many Indian faces. About the damaged nose, nothing can be said, but the chin is so unusually long and sharp as to suggest the intention to imitate a Vandyke beard, and the wing of the ear is perforated horizontally, in the middle. Perhaps it would be better to say there is no ear, for the depression where the ear ought to be seems to have been made purely for the purpose of providing a place to make the hole, and as the complete face was almost certainly intended to represent a dance-mask, such a tying-hole was needed to complete the imitation, and if this supposition be correct, the pipe is almost the only one of its kind among the several hundreds in the Museum. The stem hole (little more than one-fourth of an inch in diameter) is much less than such holes usually are, while the cavity of the bowl is an inch and one-



eighth across. The ornamental lines behind the face form the common diagonal pattern. The pipe was found in the township of South Orillia, and is the gift of Mr. W. O. Mercer.

#### STONE PIPES.

The asertion that tubes of this kind were used as tobacco pipes has never met with any favor in this quarter. It is not doubted that the earliest form of pipes was that of a straight tube, and it may be that some of these are occasionally found, but there would appear to have been tubes and tubes, and scarcely anything can be more certain than that most, if not all, objects of this kind found in Ontario were made for some totally different purpose. We have specimens of various sizes and dimensions; from little more than two to nearly twelve inches long; oval as well as cylindrical in cross section; with holes almost uniform in size throughout, and with holes an inch or more in diameter at one end, tapering to only three-eighths of an inch at the other.

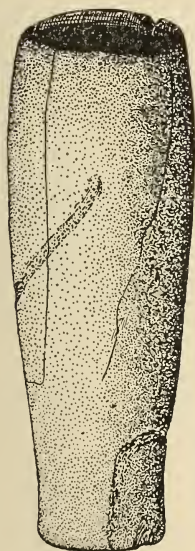


Fig. 23 (2086).  
Two-thirds dia.

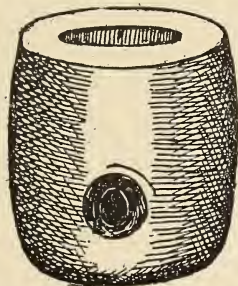


Fig. 24 (22118). Full size.

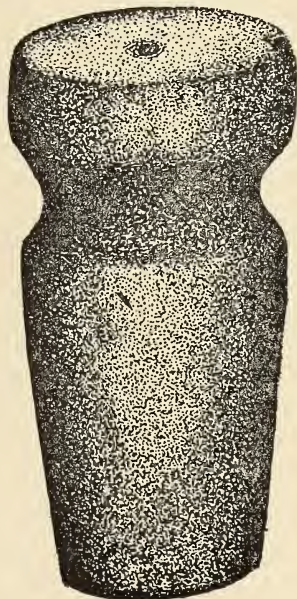


Fig. 25. Full size.

Figure 23 illustrates what may have been a smoking-pipe. The hole at the upper end is an inch in diameter, decreasing to less than three-eighths of an inch. If used for smoking, this tube must have been supplemented with some sort of mouth-piece, as the smaller end is seven-eighths of an inch thick. This specimen was found in Tuscarora township by Chief Dek-a-non-re-nah, a Mohawk, or, as the Mohawks prefer to be called, a Canienga.

A large number of the catlinite pipes one sees in museums, as well as in private collections, are freak-forms, made for barter, and highly prized by the purchasers as calumets, or pipes of peace, formerly the property of Sitting Bull, or Standing Bear, or Dark Cloud, or The Man with a Little Limp (!), but figure 24 shows us the appear-



ance of an old-fashioned utility Cree pipe, such a one as any of the forementioned bloodily disposed sachems could smoke with comfort, and, when done, attach to his scalp lock, or fasten to his belt with a thong, feeling that after all life was worth living, that is, his life.

Mr. Harry Laidlaw got this pipe from a Cree, at Portage la Prairie, Manitoba.

If the specimen illustrated by figure 25 was not meant to be a pipe, it is not easy to make another guess. The surface bears scarcely any evidence of tool-marks, otherwise than appears in the general form, except that to the touch there are slight flatnesses on the body of the stone, indicating that rubbing or smoothing had been done by moving it lengthwise over another surface. Although simple in form, the outline is graceful. The material seems to be a close-grained sand stone. The object was found in Eldon township, Victoria county, and belongs to the George E. Laidlaw collection.

Of similar design, workmanship and material, and from the same locality as the preceding specimen, is the one here shown, figure 26, and in all probability, it, too, was intended to be a pipe, notwithstanding its hammer-like look. As in the former case also, there is

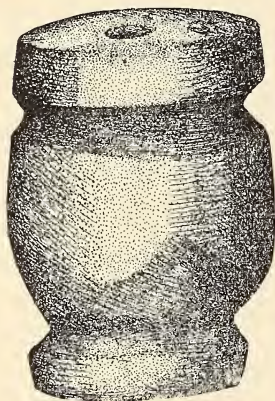
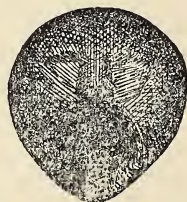
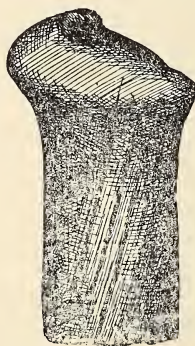


Fig. 26. Half dia.



Figs. 27-28 (22038). Two-thirds dia.

the beginning of a bowl-hole. The style of workmanship is so nearly alike in both as to suggest that they were made by the same man. As a pipe head, it would have proved very cumbersome, but we have some much heavier specimens of this kind in the Provincial Museum.

The object in question forms part of the Laidlaw collection.

In figures 27 and 28 we have illustrated a stone pipe, the up-turned face of which shows an open mouth forming a pipe-bowl—the only example we have of such a whim in stone. The material is veined, and resembles the dark quality of marble commonly known in this province as “Arnprior.” The face is very crudely shaped, merely suggesting eyes and nose. The flat base is notched slightly all the way round, and there is an attachment hole, as seen in the cut. The stem hole is straight below the chin.

This pipe was presented to the Provincial Museum by Mr. Alex. J. Blair, who found it on lot 27, concession 6, Luther township, Wellington county, a county which, although very extensive, has yielded comparatively little archæologically.

The stone pipe of which a cut is shown by figure 29 was found in Eldon township, by Lieut.-Col. Laidlaw. It is of a type not at all common, but more characteristic of that neighborhood than of any other in this province. Already, a good many of them have been

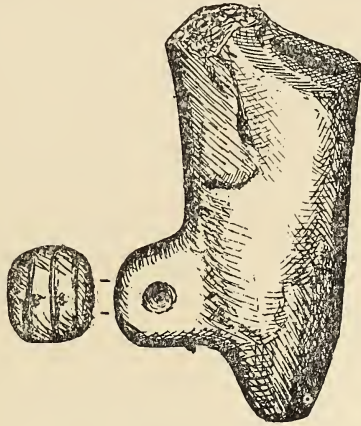


Fig. 29 (16239). Full size.

figured and described in our reports. Without having seen perfect specimens one would scarcely suppose the pipe to have represented a bird, but of this there can not be a doubt, as the front view of the holed projection shows a somewhat conventionalised imitation of talons—not an unusual device—as if the bird was in a state of rest, and grasping a branch. The use of such projections for the boring

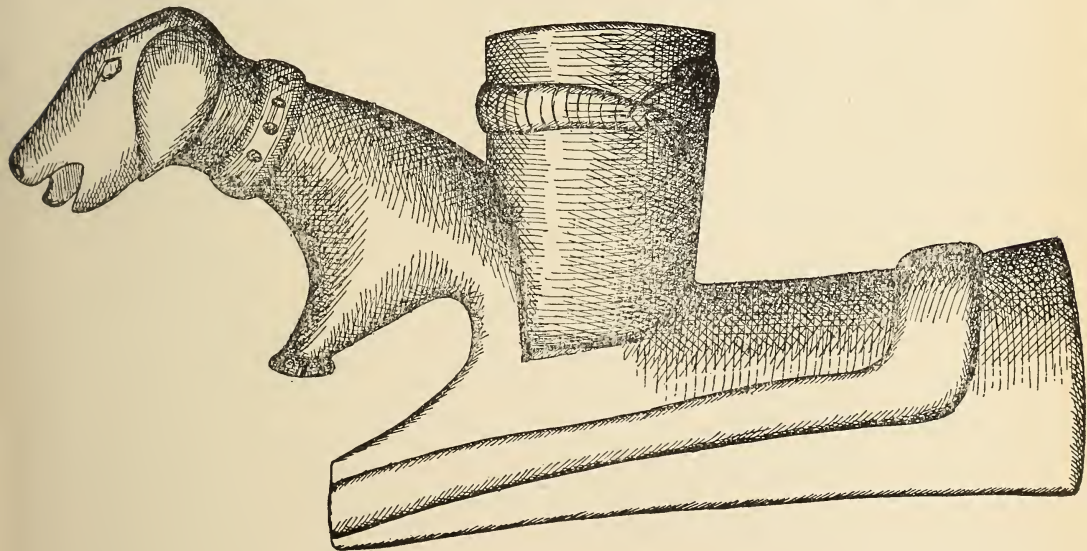


Fig. 30 (22035). Two-thirds dia.

of attachment-holes was probably an afterthought. As a rule, pipes of this kind were made either of limestone or of soapstone.

Figure 30 does not by any means represent an archæological object, but it serves to illustrate the mechanical skill of our present-day Indian, as well as to mark his fondness for manifesting it chiefly in



the making of stone pipes. This one was made by Indian Jim, of Fort McLeod, Alta., and was presented to the Provincial Museum by Mr. W. C. Perry, a generous contributor, now of Winnipeg.

The material is a fine-grained, gray limestone, and the pipe has been carved from a block which must have exceeded eight inches in length, four inches in depth, and two inches in thickness. The outside end of the stem-hole is five-eighths of an inch in diameter, and the bowl hole is nearly an inch. The work is very well done—few white men could do it as well, and it is quite evident that Jim made no attempt to pass it off as an “antique,” notwithstanding its Indian-ness. The collar on the dog’s neck, and the snake encircling the bowl, have significances pointing to a mingling of the white man’s notions and those of the Indian.

Figure 31 represents the largest stone pipe of its type now in our cases. It was procured from Mr. John Bay, who lives in Anglesea

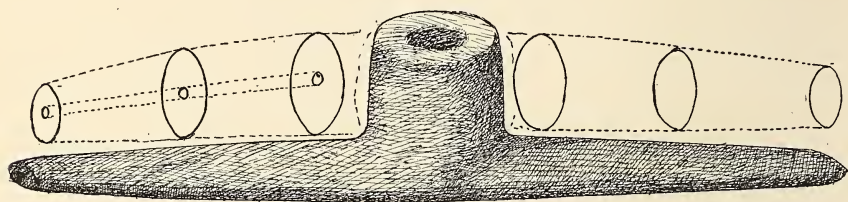


Fig. 31 (27262). A little more than one-third dia.

township, Addington county. In length it measures exactly eleven inches. The material seems to be a coarse steatite.

A much more primitive form of pipe than the preceding one is shown by figure 32 from the same neighborhood, and supplied by the same gentleman. For archæological purposes, too, its very rude-

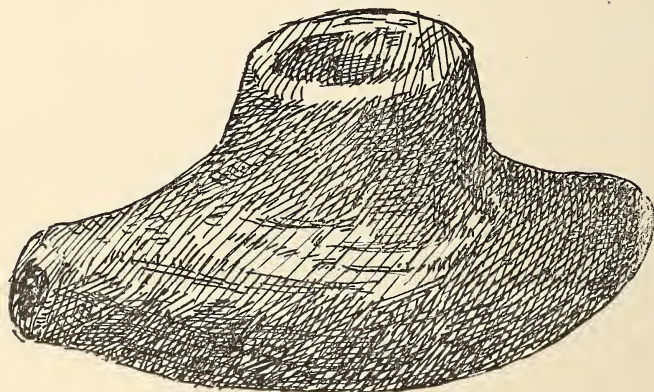


Fig. 32 (27263). Full size.

ness of form and finish suggests it as a prototypic design. Some years ago we had a similar crude but suggestive form of pipe presented by Public School Inspector Kidd, of Kingston, and found by him in Pittsburgh township, on the St. Lawrence.



## LARGE SOAPSTONE BEAD.

It is not quite clear from the appearance of this form (figure 33) whether it is an improved natural shape or one that has been specially made, but probably the latter, as it is of soapstone, and pebbles of this material, with or without weathered holes, are seldom or never found. This was picked up from an ash-heap on a village site near Balsam lake, Bexley township; Laidlaw collection.

Since the close of this report for 1905 we have received from Mr. John Bay, a Mohawk of Anglesea township, county of Addington, a somewhat similar specimen, but the hole is only one-third the size of that in figure 33, and is deeply and widely countersunk. John suggests that it is "an Indian button." No doubt he could use it as such now, but this idea of fastening, simple as it is, does not seem to have occurred to his remote ancestors.

## SOAPSTONE PENDANT. (?)

The specimen shown by figure 34 may have been part of a pipe-stem which, becoming broken, has been transformed into a bead or other ornament. The stone is steatite, and is of light color. From



Fig. 33 (21723).  
Full size.

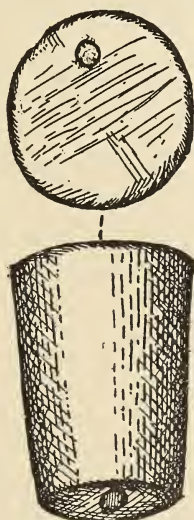


Fig. 34 (19053).  
Full size.

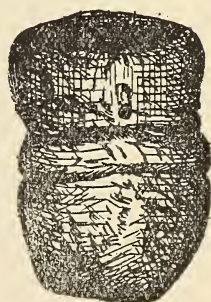


Fig. 35.  
Full size.

the end view, shown above, it will be seen that the perforation is very eccentric, a not common thing in the boring of stone pipe-stems. Specimens of various kinds are not infrequently found which at some time formed parts of something else. Even sections of clay pipe-stems have in this way been made into beads, and fragments of pottery are ground into the form of discs, supposed to have been used for gambling.

Perhaps the most interesting particular in this specimen is the hole which, although quite round at the larger end, is far from being true at the other. From lot 5, concession 1, Bexley township, Laidlaw collection.

## SMALL TOY CLAY POT.

One of the smallest clay vessels in the Museum, perhaps merely a child's plaything, is here figured. It was found near the Portage Road between Balsam Lake and the Talbot River, and is in the Laidlaw collection. This tiny cup (figure 35) was apparently moulded on the tip of a finger.

## THE WILLEY CLAY POT.

Perfect clay vessels are seldom found in graves in this province. Hitherto, those most nearly so have been discovered on ledges of rock with overhead protection from the weather, like those from Messrs. E. T. White, Clarksburg; Freeman Britton, Gananoque; and J. M. Irwin, Peterboro, although fairly well preserved specimens have come to us which were taken out of the earth by Messrs. Cyrenius Bearse, Dr. T. A. Beeman, and James Cairnduff.

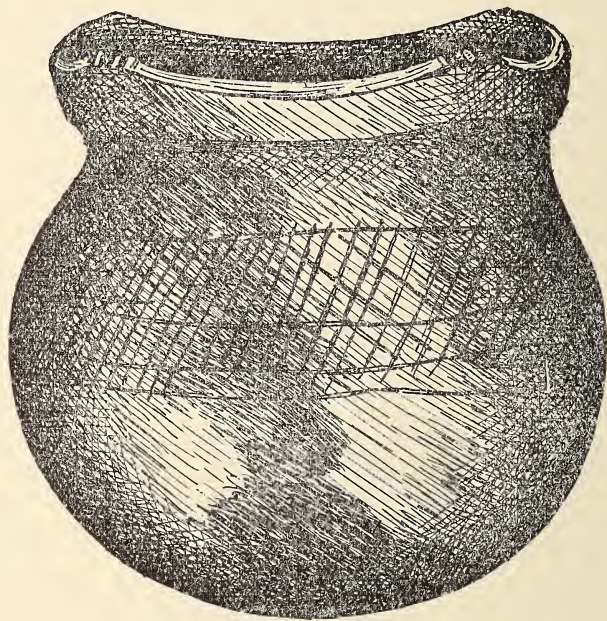


Fig. 36 (27071). Half dia.

The one represented by figure 36 is the gift of Mr. J. H. Willey, of the town of Orillia. Mr. Willey came upon this rather well-shaped vessel when digging the foundation of his house. It lay at a depth of nearly four feet from the surface, in a bed of sandy loam. It is six inches high, and almost correspondingly wide, and its plainness is relieved by only very simple attempts at ornamentation—shallow notches mark the four prominences on the lip, while the body itself bears a roughly-made criss-cross pattern in the form of a band nearly two inches wide. The shaded parts seem to have been produced by smoke, although the vessel as a whole does not seem to have been very much used.

## LARGE CURVED COPPER TOOL, OR WEAPON.

The kind of copper thing—tool, utensil, weapon, or merely ceremonial object, the shape of which is shown here. (figure 37) is one of two in the Museum. One, already described in the Archæological Report for 1900-1, was found near the town of Midland, Simcoe coun-

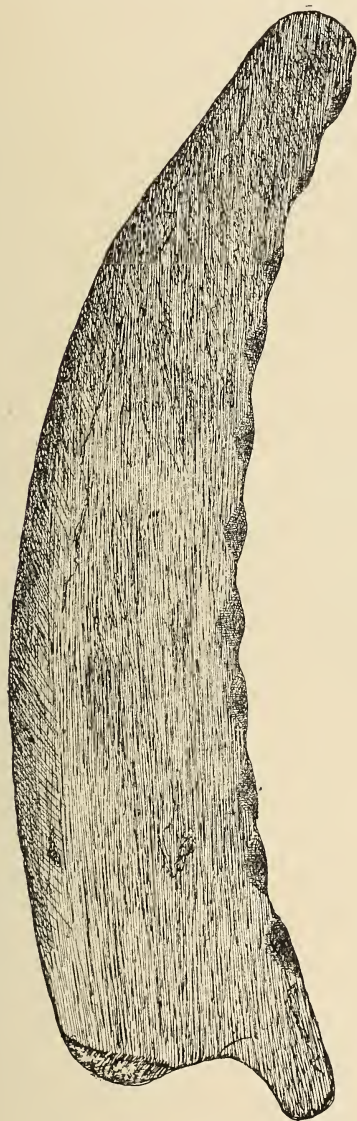


Fig. 37 (18225). Half dia.

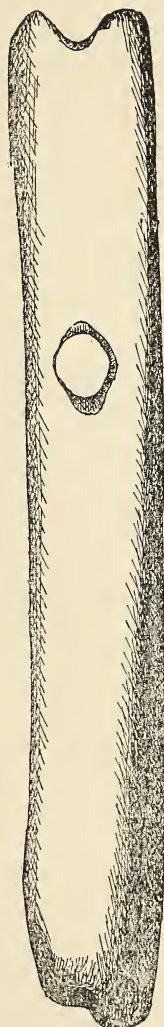


Fig. 38 (27097). Two-thirds dia.

ty (a Huron habitât), while this specimen was taken from beneath a large pine stump on block 3, township of Bexley, and is in the collection presented by Lieut.-Col. G. E. Laidlaw.

It is, presumably of native metal, but as it is without visible evidence of silver, and lacking a chemical analysis, it is impossible to be sure.



The curator would be greatly obliged to hear from any reader who knows of similar specimens in any other collection, private or public.

#### MANDAN ARROW-STRAIGHTENER.

Among a few interesting specimens procured by exchange from Mr. E. R. Steinbrueck, of Mandan, N.D., is one of bone (figure 38) the peculiar form of hole in which, is suggestive that the object is what, in Ontario, some call an arrow-straightener. Those found here are made from antlers.

Mr. Steinbrueck suggests that such objects may also have been used as gauges, in the shaping of arrow-shafts.

This specimen was supposedly, and probably, a tool of the Mandan people, and is made from a buffalo-rib.

#### NOT AN INDIAN TOOL.

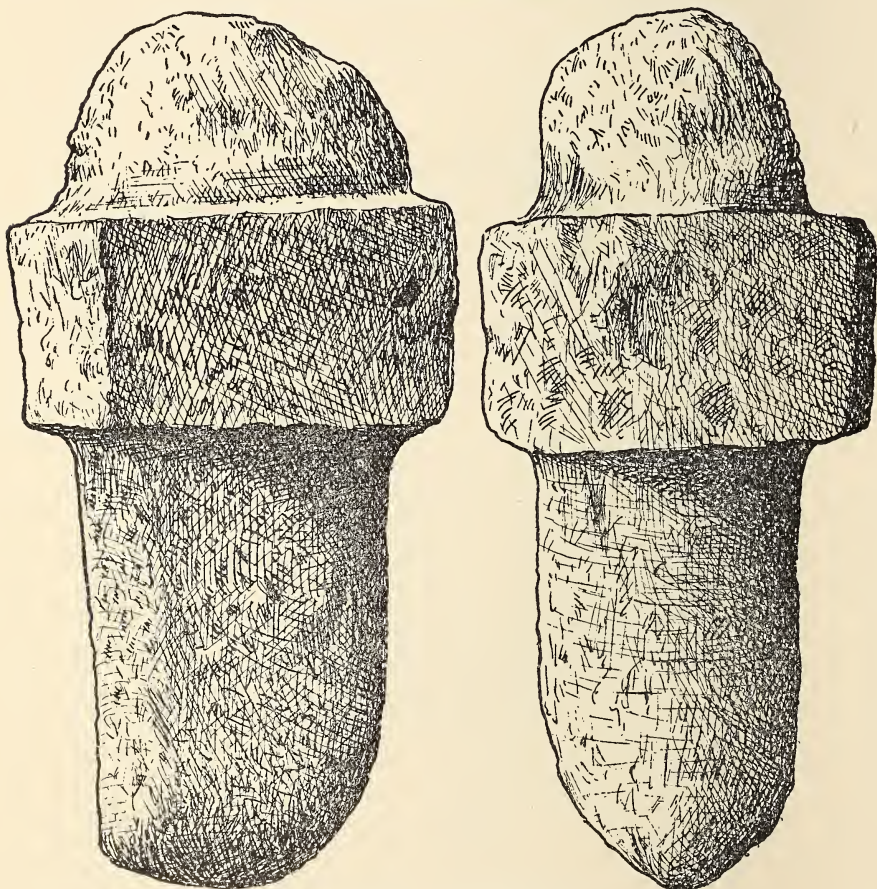


Fig. 39 (27151). Half diameter.

We are greatly obliged to Mr. Geo. L. Waterbury, of Selkirk, for the extremely artificial looking specimen here figured (39) from good drawings made by Mr. W. B. Waterbury, St. Thomas. It was found a great many years ago (fifty or sixty perhaps) near Port Dover, on Lake Erie, and seems to have been carefully preserved in the family

of the old lady (now deceased) who gave it to Mr. George L. Waterbury. Speaking at random, it may be readily supposed that during the half century or more that has passed since the stone was picked up, it has been regarded as a genuine and unique example of Indian handicraft, and has, no doubt, been wonderingly gazed upon by the neighbors in that light. Nor need this be thought at all strange, for many undoubted examples of aboriginal workmanship resemble naturally formed objects much more closely, or look much less artificial than this one does. It is only when we examine the nature of the material that doubts are at once removed, for it is composed of two kinds of stone that differ from one another in color, as well as in quality. The parts corresponding to the pole and the blade of an axe are of gray gneiss, while the squarely projecting portion is a light colored and finely grained granite. Exposed to the action of the weather, or even to the action of water alone, the gneiss has become worn, while the harder, eruptive material still stands out squarely.

It may be stated here that weathered or water-worn stones frequently resemble whole organisms or portions of organisms very closely. One, of limestone, in the Museum, looks much like a human foot, with instep, sole and heel in graceful curves; while another looks like a small hand in a mitten, with a free thumb. Two more were brought here as good examples of large pestles or mullers with widely expanded grinding surfaces. Specimens like these are valuable negatively, in archæological collections, by way of placing young students on their guard, and in assisting to correct wrong impressions that are sometimes formed by older people respecting such simulations.

The stone represented by figure 39 is nine inches long and four inches and a half wide.

#### PICTOGRAPH ON BUFFALO HIDE.

Even picture writing marks a long stride towards "the higher life," but as a method of making records, it is most uncertain as to signification, without the help of the artist-author, or of those who know about the events he represented.

An illiterate person will, most undoubtedly, see much more in a pictograph than in a page of print, but he will still be unable to arrive at anything like a true interpretation of the pictured story, without direct assistance from the aboriginal historiographer himself. Even at second hand telling, incorrect details will creep in, and frequent repetition does not improve the recital in so far as fact is concerned, especially when the repetition comes from the author's successors, whether family or official. There were not many rules followed by Indian peoples in the performance of this kind of work, and apart from the general use of particular signs to represent rain, lightning, clouds and animal life, a "red man" would have just as much difficulty in forming a connected and correct story by means of pictographs as a white man would.

Purely gratuitous as these remarks will, no doubt, prove to many, it would seem necessary to disabuse the minds of not a few, of their belief in the power of an Indian, or of anyone learned in Indian lore to read aright a pictographic record, merely from a knowledge of what the individual pictures represent.



For the buffalo-skin bearing the drawings represented by figure 40 we are under obligation to Mr. E. M. Chadwick, barrister, of this city, who writes:—

“The old pictured buffalo robe, which has been the subject of some correspondence between us, was procured by me some years ago from the family of John S. Baxter, an old man who had been in the employment of Catlin, the artist and author. Baxter himself being dead, I could only get second-hand information about it, and that so



Fig. 40. Pictograph on Buffalo Hide.

indefinite as to be quite unreliable. It was stated to have come from the Canadian Northwest, but the “prairie schooner” which appears on it indicates at least that the hero whose exploits it narrates performed some of these south of the boundary line.\* I am not able to explain much of the picture writing—perhaps, indeed, no more than is obvious; but as you desire me to do so, I will note such points as I think should be brought to the attention of any persons of whom you may expect to be able to get some opinion of value. The series of

\*Why should this be implied? Surely wheeled vehicles were used by the white explorer in our North-west at quite an early period.



incidents depicted seems to begin at the Buffalo's tail; here there is a snake, probably a totem. The name Sioux is, I believe, a corruption or abbreviation of the name given by the French to that nation. Nadowessieux, meaning rattlesnakes; why so called? Perhaps their tribal totem may have been a snake. I have been inclined to think that the robe came from the Sioux. The first picture shews an Indian slain and scalped by the hero. The vanquished has a shield which may be heraldically described as "per pale gules and vert," (i.e., bisected, and coloured half red and half green) and adorned with a lambrequin of feathers; this shield the victor precisely, as was the custom of medieval European Chivalry, appropriates, and subsequently carries throughout the rest of his career. In this first picture a horse appears with a scalp attached to his bridle; and the accompanying little figures indicate that the owner of this horse—victor or vanquished?—was one of a mounted party of four. The next scene is an attack upon a "prairie schooner," in which three white persons are slain. Little dots or short lines inform us that the hero was here accompanied by four others. Less gruesome are the following which are hunting scenes, in one of which the hero, one of a mounted party of five, kills a buffalo under (I suppose) such circumstances as to render this exploit a notable one—one worthy of special record. The lower part of the robe is a little more difficult to understand, and is such that a good explanation of it would be interesting. There are three tepees, each of which is marked by a totem over it, and in each case the same totem appears on the upper part of the tepee as well. These are, first, a Buffalo's head "cabossed," i.e., shewing the front of the head, without any part of the neck appearing; the next is an eagle "displayed" in the conventional manner customary among many Indian nations, and this totem appears also in the lower part of the first tepee; the last is a beaver (?) Between two of the tepees is a slender rod from which depend three scalps waving in the wind. From a cross piece carried by two pairs of stakes depend several small objects not easily decipherable.\* And here now appears the hero, mounted and seeming to be in all his war-paint and glory, armed with a spear and carrying the shield above mentioned. He is followed by three others, mounted, as three little horse-shoe shaped figures tell us; and they seem to have come from an expedition in which an Indian was slain and three whites slain and scalped—possibly those whose scalps adorn the encampment. It may be also that the scalp which decorates the bridle of the horse is that of the vanquished in the first scene. Lastly, it is to be observed that the eagle displayed appears under the last appearance of the hero, perhaps it may be his personal or family totem, and that the tepee on which it appears is his abode; but, if so, whose are the two others?"

I wrote to the Rev. Dr. John Maclean, of Halifax, a gentleman who spent some of the best years of his life among the Blood Indians in our Northwest, and who made a special study of their ethnology, asking his opinion with respect to the drawings on the skin. The following is his reply:—

"I am afraid to attempt a translation of the story on the buffalo hide, as it requires an expert, and should be placed in the hands of an Indian who will not be influenced in any way by a white man. Let

\*Probably strips of buffalo flesh, being dried for preservation as pemmican.  
—D. B.

me suggest that you send a copy to: 1. The Indian Agent, Blackfoot Reserve, Gleichen, Alta.; 2. The Indian Agent, Blood Reserve, Macleod, Alta. Ask these gentlemen to have a translation made by one of the Indians, and sent to you. You may use my name, as these are personal friends of mine. Here, however, is my guess, which I would like to see compared with what the Indians say themselves:

I think it is an Indian warrior's autobiography, and noting the marks on the enclosed copy, there appear to be four events, or chapters.

1st. The Indian has alone attacked three lodges, whose totems are seen on the lodges, and he slew three men, taking their scalps.

2nd. Is an account of a hunting trip, where the hunter passed through a wooded district, and there was an abundance of antelope and other game, and he was successful in a buffalo hunt.

3rd. Is a record of battle with white men, where he was the victor in the fray, and slew three of his enemies.

4th. Is a battle with an Indian, whom he slew.

The name of the hero appears to be "The Snake."

My friend, the reverend doctor, modestly admonishes me to refrain from making known his translation, because, as he has said, "It requires an Indian free from the white man's influence to do the pictograph justice," but I have ventured to violate this request for the reason that it will not be easy to find an Indian of the required kind. But to compensate for this breach of honor, I have complied with his suggestion, that I should correspond with the two Indian agents whose addresses he supplies.

I have also asked that the Rev. Egerton R. Young, who spent many years among the prairie Indians, would be good enough to give us what he thinks the story might be, for there are few white men better qualified to do so than he is. He writes thus:—

"The pictograph is not a very ancient one, as the presence of the guns indicates. However, as there is a scalping scene, it is, perhaps, fifty or sixty years old.

The picture is a complete one, and represents the hard times for the Indians which came with the almost complete disappearance of the buffalo, as is seen in the fact that only one is left, and, in order to secure him, the hunter, after wounding him with an arrow, is obliged to use both gun and lance. Their lack of food is also represented by the lone prairie chicken in the right hand corner.

To read the story fully we must begin at the first wigwam in the left hand corner. This wigwam represents that the Indians were reduced almost to starvation, that is, they are only able to get prairie chickens, represented by the picture of one on the tent, and berries the saskatoonenah-nah-menisuck (blueberries) as shown by the bush outside the tent, have called in the Conjuror or medicine man, whose totem is the buffalo head, drawn on the tent, and also duplicated by the artist over it.

The second and third wigwams both indicate almost starvation, as the drawings on them are of birds or small animals, as in the case of the first wigwam the bird and prairie dog, or even gopher, are drawn over each tent to make it more emphatic.

Higher up we see two elks and two bears retreating from the prairies to the mountains beyond the reach of the hunters, as the prairie Indians do not go to the mountains. Thus the whole lower

half of the picture represents that these Indians are reduced to destitution.

The presence of the Conjuror is, doubtless, to encourage reprisals on the pale faces, whose invasion of the country, the Indians believe, has brought about such a sad state of affairs.

Vengeance is now to be taken. The snake with open mouth, the emblem of Indian war, secret and unexpected, shows that a warrior is on the war path. He is alone. He finds at last some white men. One white man was riding a horse. The other men had the covered waggon. That they were white men he discovered by the tracks of the horses as they were shod with iron shoes, as the tracks indicate. The warrior first kills the man on horse back and scalps him. He then makes an attack on the waggon and party, and succeeds in getting two more scalps, and drives the rest of the pale faces into the mountains.

Then, with the captured horse and scalps, he returns in triumph. On his way he kills the buffalo, to which we have referred. He first shows the scalps to the people. They are then hung up in triumph on a pole, while the buffalo meat is strung up on a framework near the wigwam to dry.

That it is the same warrior returning is shown by the fact that the great war shield is the same when the attack is made on the waggon as when the warrior is returning in triumph."

The following from Mr. W. Murison, Indian agent, Kutawa, Sask., is also interesting.

The work is, undoubtedly, of Sioux origin. I have shown the diagram to a number of the old Cree and Saulteaux Indians in this Agency, and they cannot give me any assistance in explaining the painting.

I worked for eight years amongst the Assiniboinés, who are a branch of the Dakota or Sioux nations, and know that they are very fond of portraying interesting experiences in their lives in this manner, and from interpretations which have been given me of similar paintings I should think that the painting represents some experience of the Indian who did the work.

This Indian has, evidently, killed three persons, one of which was a white man, and, as the white man has a covered waggon, I should judge that he had his wife along with him.

Each feather on the Indian's head represents a scalp taken. Upon the arrival of the Indian at his Teepee he hangs the scalps on a pole to show that he is a great warrior.

The animals shown in the picture represent the results of his hunt, viz.: Two bears, two deer, a beaver and a buffalo.

The two crotched sticks support a pole upon which the meat is dried for future use. I note the picture of a rattlesnake. This represents a danger which presented itself while the Indian was out on the hunt. The Indians tell me that they had to keep a keen lookout for snakes while in camp. The snakes, they say, were attracted to the camp by the smell of the cooking meat. The smell from the intestines while being cooked would attract rattlesnakes from a considerable distance.

The fact of a white man being shown as a victim of the Indian prowess points strongly to its being of Sioux origin, as the Cree and Saulteaux do not boast of their fights with the white man.

Trusting that the foregoing may be of some assistance to you.

Yours truly,

WM. MURISON, I.A.



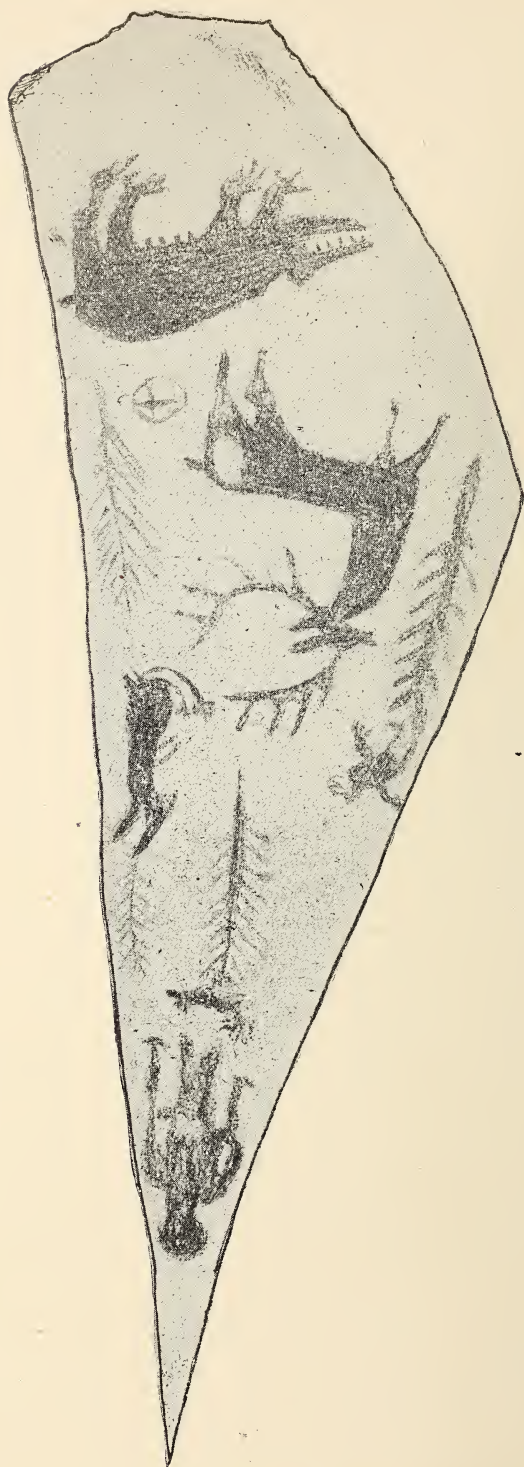


Fig. 41 (17810). Two-thirds size.

Figure 41 is a copy of Blood Indian (Northwest Territory) drawing on raw-hide.

Man, deer and bear seem to be the principal animals represented, along with some nondescripts, two of which may have been meant for birds on tree-tops. At first look these drawings might be taken for mere diversions, but further examination would appear to show a purpose—especially noticeable in the world-sign—the crossed lines within the circle.

The original drawings were made either with a black lead pencil or more probably a piece of crude graphite.

This specimen was presented to the Provincial Museum by the Rev. Dr. John Maclean, now editor of "The Wesleyan," Halifax, Nova Scotia.

## BONE AND HORN HARPOON HEADS OF THE ONTARIO INDIANS.

W. J. WINTERBERG.

### *Introductory.*

The fish-spear, or harpoon, was extensively used by many of the aboriginal inhabitants of North America. The first European colonists were astonished to see the abundance of fish in the rivers and lakes, and they found that the natives captured them in various ways—with hook and line, nets, weirs and harpoons. In the accounts given by these early colonists and travellers, we find numerous references to the use of the latter implement. Captain John Smith said: "They of Accawmack use staves like unto javelins, headed with bone; with these they dart fish swimming in the water" (p. 36). In his "Account of Two Voyages to New England," John Josselyn gave a very similar description: "The *Bass* and *Blew-fish* they take in harbours and at the mouth of barr'd Rivers being in their *Canows*, striking them with a *fisgig*, a kind of dart or staff, to the lower end whereof they fasten a sharp jagged bone (since they make them of Iron) with a string fastened to it, as soon as the fish is struck they pull away the staff, leaving the bony head in the fishes body, and fasten the other end of the string to the *Canow*. Thus they will hale after them to shore half a dozen or half a score great fishes" (p. 140). According to Roger Williams, "The Natives venture one or two in a *Canow*, and with an harping Iron, or such like Instrument, sticke this fish, and so hale it into their *Canow*" (p. 102). Loskiel, in speaking of the Delawares and Iroquois, said: "The Indians always carry hooks and small harpoons with them whenever they are on a hunting party" (Part I., p. 94). The Montagnais, we are informed by Sagard (p. 685), captured fish in two ways—"with a wicker basket or with a harpoon during night by the light of fire." The sturgeon harpoon of the Iroquois, as described by Charlevoix (p. 87) was secured to the canoe by a long cord. Le Jeune\* describes the harpoon for spearing eels as "an instrument consisting of a long stick, of the thickness of three fingers, to the end of which they fasten an iron spike, which

\*Relation de ce qui s'est passé en la Novvella France sur le grand Flevve de S. Lavrens en l'année, 1634; Relation des Jésuites, etc Vol. I, p. 44.





harpoon, they drive the iron into it, and the two prongs, yielding to the force of the thrust, let in the eel, after which they contract again by themselves (having opened merely by the shock of the stroke) and prevent the speared eel from escaping. Perceiving an eel [the Indian] darts his harpoon without losing hold of it, pierces the eel as stated, and then throws it into his canoe. Some will catch three hundred, and many more, in a single night, but very few at other times.”\*

It was among the Eskimo, however, that the harpoon reached its highest development, calling into existence numerous accessories which were unknown to the Indians; but for detailed information about Eskimo harpoons, and also those used by the West Coast and Southern Indians, the reader must be referred to the books mentioned in the list of works consulted, the limits of this article not permitting the writer to quote any more of the numerous extant descriptions.

One is struck with the remarkable similarity between harpoons from Europe and America. As Sir J. W. Dawson said in his “Fossil Men,” “The visitor to the British Museum may see bone harpoons from the caves of the Reindeer folk of France, so like those in the same collection from Greenland and Terra del Fuego, that all might have come from the same workshop.” Mr. W. Boyd Dawkins, in his “Early Man in Britain” (p. 233) suggests that the Eskimo might be the descendants of the ancient cave men of France, and he bases his conclusions mainly upon the similarity between the carved weapons and implements and other art products of the two peoples. The resemblance between American and European harpoon heads would, perhaps, also tend to strengthen Prof. Dawkins’ hypothesis. He says “there are no savage tribes known which use the same set of implements without being connected by blood;” but then, if this similarity, in so far as harpoons are concerned, is suggestive of racial affinity, how would we account for the resemblance of the Fuegian to Eskimoan and European forms, for they are all similar in form and function? His conclusions regarding the Eskimo and cave men, however, seem plausible.

It will be observed that many of the harpoon heads figured in this article resemble Eskimo specimens, and this similarity is strongly suggestive of Eskimo influence. In his “Notes on Primitive Man in Ontario,” Mr. Boyle says: “On account of the extensive use of bone by the Eskimo, there is a strong temptation to refer many of our specimens of this kind to Innuít origin, especially as the resemblance of ours to theirs is often very marked. But, in this respect, there does not appear to be any more reason for so doing than there is for attributing the same origin to flints, vessels of soap-stone and some other things. Still, when we take into account the Huron-Iroquois tradition as to the former abiding place of the nation on the north shore of the gulf of St. Lawrence, we may at once concede the probability of strong Eskimo influences affecting the work of our Indians.† That bands of these people habitually found their way south and west of the Ottawa is extremely improbable, and it has not been shown that they ever resided here before the advent of our Indians. Anything, therefore, indicative of Eskimo influence may be accounted for as already mentioned, by the old-time contiguity of the peoples ‘down

\*Father Dablon said, “Some take as many as a thousand in a single night.”

†According to William E. Connelley the Wyandots “claim to have known the Eskimo.” Ont. Archæological Report for 1899; p. 93.

by the sea,' if, indeed, not the workmanship of the Montagnais-Nascopies, who, it seems clear, occupied a large portion of eastern Ontario at some distance back from the St. Lawrence."\* But may not the Eskimo at one time have occupied Ontario, and even New York? It has been "claimed that the Northmen encountered the Eskimo in New England nine hundred years ago."† "From evidence based upon investigations by Doctor Rink, and the archæological indications noted by Mr. Dall and others," said the late Dr. W. J. Hoffman, "the Eskimo are believed to have become a littoral people in America by expulsion from some interior regions of North America, such expulsion having been brought about through the northward expansion of the Athabaskan tribes toward the northwest, and the Algonkian tribes toward the northeast. Even within historic times the Eskimo occupied a more extensive coast line southward on the Atlantic than at present, and it is impossible to conjecture what may not have been the southern limits, in prehistoric times."‡

Among other evidences of Eskimo influence and contact, we have the semi-lunar knives of slate (of which there are several in the Provincial Museum) which are very much like the Eskimo "woman's knives." Our Indians also seem to have had a knowledge of the Eskimo toggle-joint. Several articles made of walrus horn have been found on New York Indian village sites, and there is a walrus horn§ from Balsam lake in our own Museum. These were no doubt obtained by bartering with the Eskimo or Nascopies.

"As for the fishes found in the rivers and lakes in the country of our Hurons, and particularly in the fresh-water sea," Sagard tells us, "the principal are the Assihendo . . . and trout, called Ahouyoche by them, which are mostly of extraordinary size, insomuch that I have not seen there any that were not bigger than the largest we have on this side. . . . The pike, called Soruissan, which they catch here also with the sturgeon, called Hixrahon, astonish people, for some are of marvellous size." (Vol. III., p. 693.) Pike of large size are frequently caught in many of the inland waters of Ontario, and sturgeon have been captured in the Grand River, as far north as Brantford, in recent years. Judging from the number of large veretebræ found on many Indian village sites throughout the Province, the salmon trout was also abundant. Ample use for harpoons, therefore, was to be found in the localities where harpoon heads have been discovered.

Most of our harpoon heads were no doubt fastened to the shaft in the same way as are those of the Eskimo. Figure 1 shows the barbed head of an Eskimo harpoon,¶ and a portion of the foreshaft and the connecting line. The wooden shaft and the foreshaft, a cylindrical piece of fossil ivory, are fastened together by a tenon joint, re-inforced by a whipping of thong. A plug consisting of two pieces of willow wood (B), with a small hollow in each, into which the tang of the bone head fits loosely, is inserted into the socket hole of the

\*P. 72.

†"Southern Visits of the Eskimo," by Rev. W. M. Beauchamp; Proc. of Amer. Ass'n, 1894; Vol. 43, pp. 344-5.

‡"Graphic Art of the Eskimo." Report of the U. S. National Museum, 1895, p. 765.

§The walrus is known to have frequented the coast of Prince Edward Island within historic times, so it is also possible that the Ontario and New York Indians obtained their material from the Micmacs.

¶From Herschel island, at the mouth of McKenzie river, where it was collected by Rt. Rev. I. O. Stringer.

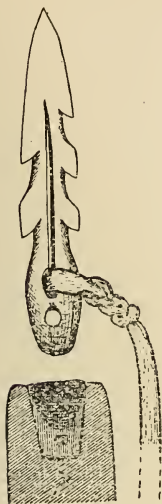


Fig. (1).



Fig. (2).



Fig. (3).



Fig. (4).

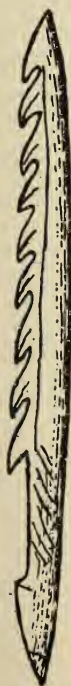
Fig. (5).  
Half size.Fig. (6).  
Full size.

Fig. (7).

NOTE.—Figs. 5 and 6 are after Rau.



foreshaft (A). But if they were parts of retrieving harpoons, our specimens would have been fitted directly to the wooden shaft, in the same way as the Fuegian examples and the "fisgig" described by Josselyn, for nothing corresponding to the foreshaft has ever been found in the Province. The heads of all Eskimo retrieving harpoons are detachable, but here in Ontario, such an arrangement would, perhaps, not have been required, as it was unnecessary to let the harpoon leave the hand: the fish could have been captured in the way described by Williams, by sticking them, and then hauling them into the canoe or to the shore. The toggle-head harpoon, however, was intended to be thrown, and if our Indians used the more ingenious toggle-head, they would also have employed the simpler harpoon with detachable head; for the toggle-head type, it seems, is an outgrowth of the latter.

The eel spear described by LeJeune was unlike anything figured in this article, unless some of our unilateral specimens were fastened together to a shaft, as are two Eskimo examples shown in Nilsson's "Primitive Inhabitants of Scandinavia" (Plate IV., figures 75 and 76). While excavating on the Sealey farm, Brant county, a farmer found two unilateral harpoons lying so close together—the barbs facing—as to suggest the idea that they had both, perhaps, been fastened to a single shaft.

There are three types of harpoon heads. We will describe the specimens belonging to each type separately.

### I. UNILATERALLY BARBED.

The simplest form of harpoon head is the unilateral with barbs along one side only. Specimens of this type have been found over a wide area in North America—in the following States and Provinces: California, British Columbia, Alaska, Alberta, Manitoba, Minnesota, Wisconsin, Michigan, Ohio, New York, Massachusetts, Maine and Nova Scotia. Heads of this type were also used by the natives of Tierra del Fuego, some of them being over fifteen inches long. Many of the Eskimo specimens are unilateral. A large number are found in New York, but very few in Ohio and Michigan. The Ohio specimens are mainly from near Columbus and Madisonville. Those from the former place were found in mounds. Some of the Wisconsin heads are made of copper. The Nova Scotian harpoons differ from ours in having strongly shouldered barbs. A five-barbed specimen from Lunenburg county, in the Provincial Museum, Halifax, of which Mr. H. Piers, the Director, kindly supplied me with a sketch, has all the barbs shouldered.\* Figure 27*d*, in Dawson's "Fossil Men," shows a Micmac example from Nova Scotia, which has the notches, forming the barbs, cut out square, and in addition the edge is serrated for about three-quarters of the distance between each barb.

It is a matter for conjecture why these harpoon points should be barbed on the one side only. One would think that this might deflect the course of the harpoon during its passage through the air or water. M. Broca, the well-known French anthropologist, was struck with this feature, and in describing the harpoon of the cave men, said, "The use of its barbs was to catch and retain 'the fish after it was struck;

\* A harpoon head (fig. 239 in Rau's "Prehistoric Fishing") found in a grave at Fort Wayne, near Detroit, Michigan, very close to our western borders, resembles this specimen, the barbs all being shouldered; and this is the case with another Michigan specimen shown by Rau in his fig. 231.

but why," he asks, "were they all upon one side? To diminish the width of the dart so that it might penetrate more readily? I cannot say." And in a foot-note he adds: "One of my colleagues of the French Association, M. Lecoq de Boisbaudran, in a communication to the anthropological section, makes some very interesting remarks upon the mode of action of the unilateral barbs. While passing through the air, these barbs do not cause the harpoon to deviate perceptibly, but as soon as it enters the water, the unequal resistance it encounters must necessarily change its direction. It would seem, then, that the fisherman who aimed straight for the fish would miss it.\* Now, it is well known that a straight stick appears to be broken [or bent] when plunged obliquely in water; in like manner, in consequence of the refraction of the luminous rays, the image of the fish is displaced, and if direct aim were taken at the image, it would also be missed. Here are, then, two causes of error. Now, it is evident that if they can be brought to act in opposite directions, they will counteract each other, and M. Lecoq shows, that when the barbed side is turned downward, the harpoon will reach its destination. This arrangement of the harpoon was then intended to rectify its course, which indicates great sagacity of observation in our troglodytes."†

The unilaterally barbed heads might be conveniently divided into two sub-types—those with a single barb and those with multiple barbs.

### *Single Barbed.*

Figure 2 (14,806)‡ shows the most crude example in the Museum. It seems to have been made from a splinter of elk horn. With the exception of pointing it and forming the barb, very little work has been expended on it, the basal portion being left in its original condition. The tip and the barb are both broken as the result of decay. This specimen is 4 inches long. It was found by Mr. Boyle in the large Miller mound, near the mouth of the Otonabee river, Peterboro' county.

The specimen shown in figure 3 (20,032) is made from a fragment of elk horn, and is only partly completed, the reverse side being still in the rough state. Considerable cutting has been done to reduce the thickest portion, but much remains to be cut away. The base has been whittled until it is slightly rounded. There is a deep notch on one side, and about midway between the barb and the base there is another, but not quite so deep. Perhaps it was the intention of the workman to reduce the thickness between the barb and the notch so as to conform with others of the same type. Length, 5 inches. It comes from the Sealey farm, Brant county.

A fine specimen of horn, from the Sealey farm, is represented in figure 4 (25,513). It has one large prominent barb which is broken or cut off square. The tip is fractured, but otherwise it is a very well

\* A friend, who has had some experience in spearing fish, informs the writer that if one aims directly at the fish he will miss it, but by aiming at a point some distance from where it appears to be (the distance, of course, varying according to the depth), the spear will not fail to pierce the fish. The Southern Indians also seem to have been acquainted with this fact, for Adair tells us that "If they shoot at fish not deep in the water, either with an arrow or bullet, they aim at the lower part of the belly, if they are near; and lower, in like manner, according to the distance, which seldom fails of killing." (Pp. 402-403.)

†The Troglodytes, p. 329.

‡The numbers enclosed in parenthesis are those in the Museum catalogue.

preserved specimen. It is 8 3-16 inches long and a little over one-half inch thick. One particular feature of this, as well as figures 7, 8, and 9, is the shouldered projection on the basal portion, which was no doubt intended to retain the cord by which it was fastened to the shaft. This is no uncommon feature on European specimens. We give figures of two well-known examples for comparison, figure 5 showing one from the rock-shelter of Bruniquel, France, which, although otherwise dissimilar, resembles figure 4 very much. It will be observed that the other, figure 6, from Kent's Cavern, Devonshire, England, is provided with an almost similar projection, but it is not so strongly shouldered. Figure 224 in Rau's "Prehistoric Fishing" shows one from Unalashka island, which also resembles figure 4 very closely, and some from British Columbia shell-heaps possess this feature.

The example shown in figure 7 (628) is also from Brant county. This specimen is made of elk horn and is 7 $\frac{3}{8}$  inches long. It is perfect with the exception of the tip. The base is slightly beveled or wedge-shaped. It is flat on one side and rounded on the other. This head was no doubt fastened to the shaft in the same way as figure 4, the function of the more angular shoulder being the same as the projection.

Figure 8 (7,088) shows an unfinished harpoon head from York county. It is made of elk horn, and retains the cellular structure on the reverse side. The barb and point are quite sharp. The base is worked thin until it is wedge-shaped—no doubt so that it could be easily inserted in the socket hole of the shaft. This specimen is 5 inches long.

A large number of unfinished harpoon heads come from the Sealey farm, Brant county. The one represented in figure 9 (20,034), from this place, is of the same type as the preceding specimens. It has been very roughly cut out and reduced to shape with a hatchet or other sharp metal tool. Many of the cuts could have been made with an iron axe only, as they are long and deep, and clear cut. In forming the base, a deep cut was made on each side, and the undesirable portion of the material broken off. After the horn had been hacked into some resemblance to a harpoon, it appears to have been "shaved" or whittled with a knife until it assumed the desired form. Figure 9 shows all these successive stages, and is very interesting and instructive on this account. The barbed portion of these unfinished specimens is always completed, but in this example the cuts made with the knife have not been smoothed. The shaft near the base is somewhat gibbous, but this undoubtedly would have been partly reduced by the smoothing or polishing process. It is hard to say whether it was the intention of the workman to provide this one with a hole or not. Considering the stubbornness of the material, it is really astonishing how much endurance was displayed in the manufacture of these implements. The length of this specimen is 8 $\frac{3}{4}$  inches. It is cellular on the reverse side.

Figure 10 (25,521) is another unfinished specimen of this type made of horn. It is 5 7-8 inches long and comes from the Sealey farm. The barb is broken.

In the specimen shown in figure 11 (20,033) we have a slight departure from the preceding forms, this one being shouldered on both sides, the shoulder extending across the cancellated side shown



in the figure. The other side is smooth. It is  $8\frac{3}{4}$  inches long, and a little more than  $\frac{3}{4}$  thick, thinning down to less than  $\frac{1}{4}$  inch at the base. Like all the large harpoon heads, it is made of elk horn. It was found on the Sealey farm.



Fig. (8).



Fig. (10).



Fig. (9).



Fig. (11).



Fig. (12).

Figure 12 (25,514) shows a large, heavy, unfinished specimen of elk horn,  $9\frac{1}{4}$  inches long. It is from the Sealey farm. The illustration shows the rude state in which the specimen was left, the side shown still retaining the rippled or corrugated appearance character-

istic of deer and elk horns. The other side is cellular. The barb is well made, sharp in the axil, and has a moderately sharp point. The



Fig. (13).



Fig. (14).



Fig. (15).



Fig. (16).

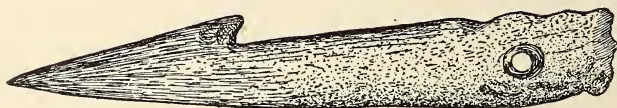


Fig. (17).



Fig. (18).

base is abruptly expanded. Perhaps it was the intention of the maker to have a hole through this expanded portion, as in many

others of this type. In his "Horn and Bone Implements of the New York Indians," Dr. Beauchamp figures two specimens (242 and 245) resembling this one, although the bases of his are not so expanded.

Another unfinished harpoon head is given in figure 13 (20,035). It is 9 inches long. The head or barbed portion is the only part that is finished. This specimen was found on the Sealey farm.

In figure 14 (25,601) is shown another specimen from the Sealey farm, and this is of the same, single barbed type. It is 7 3-8 inches long. As may be seen in the illustration, it is unfinished. The reverse side is flat. The basal portion gradually decreases in thickness toward the end. The point is obtuse, but the barb is quite sharp.

An elk horn specimen, 7 1-8 inches long, from York county, is shown in figure 15 (8,101). With the exception of the basal portion, which appears to be unfinished, this specimen is well made. The base has had some cutting down to reduce its thickness. The side figured shows the natural roundness of the horn, the lower one is flat. This specimen differs from the ones previously described in having a hole in the expanding lower part. It has been roughly gouged out on both sides, and is more diamond-shaped than round. The axil of the barb is acute and the point is quite sharp. The tip is broken.

The well made specimen of elk horn, of which an illustration is given in figure 16 (8,132) comes from Beverly township, Wentworth county. The basal end is considerably flattened and thinner than the shafted portion, and is strongly shouldered. The hole was made by two conical perforations meeting in the middle. The tip is broken. The axil of the barb is not very acutely angled, and the point of the barb is obtuse. Length nearly 8 inches.

A very simple form is shown in figure 17 (20,036). It comes from the Sealey farm. The hole has been drilled from both sides, the perforations meeting in the middle. The base has been slightly beveled on the side shown in the illustration, but otherwise this end of the implement is still in the rough state. It retains the natural corrugated surface of the horn, and the under side is cellular or cancellated. The barb is moderately sharp and the tip acute. On one of the edges, near the hole, are three shallow notches; and these undoubtedly facilitated the fastening of the line, or of the head to the shaft. The length of this specimen is  $6\frac{3}{4}$  inches.

The specimen represented in figure 18 (629) is from Brant county, and is interesting on account of the position of the hole, which is at some distance from the base. It was drilled entirely through, and not from both sides, as is usually the case. In addition to the drilling of the hole, pieces of the horn have been gouged out on either side of the perforation. The base was cut with an axe and no further work has been expended on it, except, perhaps, a little whittling to reduce the thickness. The cut, as may be seen in the figure, is sharply beveled. The lower side of this specimen is flat. The barb is well made. Length 7 inches. Figure 232, in Rau's "Prehistoric Fishing" shows a very similar specimen from Madisonville, Ohio, but the hole is much nearer the base.

What may originally have been a head with two barbs is shown in figure 19 (7,895). It is from Lansing, in York county. This specimen is of deer's horn and is very crude. The base is much decayed and may have been much longer. The barb is broken and the tip is very blunt. There is an irregularly shaped hole near the base. The reverse side is slightly hollow. It is 4 5-16 inches long.





Fig. (19).



Fig. (20).



Fig. (21).



Fig. (22).



(Fig. 23).



Fig. (24).



Fig. (25).



Fig (26).



Fig. (28).



Fig. (27).

Figure 20 (20,145) shows a specimen from the Baldwin farm near Brantford. It may have had more than one barb, as a considerable portion is broken away. It is of horn and retains the natural hollow on one side. The hole is very near the edge and also close to the barb. The base is somewhat decayed, and it is difficult to say whether it originally was much longer or not. It is  $6\frac{1}{2}$  inches long.

#### MULTIPLE BARBED.

The small specimen shown in figure 21 (14,805) is from the large Miller Mound, Otonabee river, Peterboro' county. It is of horn, and is a little over  $3\frac{3}{4}$  inches long and about  $\frac{1}{4}$  thick.

Figure 22 (16,743) shows an unusually squat form, made of elk horn, from Waverly, Simcoe county. It is  $4\frac{1}{2}$  inches long. The tip of this specimen is much decayed and the last barb is also quite blunt as the result of decay. There is a round hole through the basal portion.

The very nicely finished specimen of deer horn shown in figure 23 (17,983) was collected by Lieutenant Geo. E. Laidlaw in Bexley township, Victoria county. It retains the spongy or cancellated structure on one side, which is now somewhat flattened. The base has been brought to a rounded point so as to fit into the socket hole in the shaft. The hole is very roughly drilled. The barbs and their axils are quite acute, but the tip is obtuse. The length of this specimen is 5 5-16 inches.

The fragmentary specimen of bone represented in figure 24 (14,794) was found in the Miller mound, Peterboro' county, by Mr. Boyle. It retains the natural hollow of the bone on one side near the fractured end. The barb is unlike that of any other specimen in the museum. It resembles those on a specimen from Maine, shown by figure 237 in Dr. Rau's "Prehistoric Fishing." The axil of this barb is not sharp, but rounded, and the point does not project far beyond the edge. This fragment is a little over  $2\frac{3}{4}$  inches long.

Figure 25 (18,043) shows a specimen from lot 1, North Portage Road, Bexley township, Victoria county, which was collected by Lieutenant Laidlaw. It seems to have been made from a portion of a deer's tibia, part of the articular end still remaining and forming the base of the specimen. Some rubbing has been done to make this end much thinner. Advantage has been taken of the natural depression on the side of the bone to form an irregular, oblong hole. The barbs are all somewhat rounded, and the tip is obtuse. A portion of the narrow cavity remains on the reverse side. The length of this specimen is  $3\frac{3}{4}$  inches.

The smallest harpoon head (it is only  $2\frac{3}{4}$  inches long) in the Provincial Museum is represented by figure 26 (22,017). It is perfect, and a very well made specimen indeed. All the barbs except one are acute, and the axils are rounded. The tip is quite sharp. The eye-hole is a little more than  $\frac{1}{8}$  in. in diameter. This specimen is made of deer horn and comes from lot 13, concession 2, East York township, York county.

In many respects the specimen, from Victoria county, shown in figure 27 (8,091) is similar to the one last described, although it is very much larger. This is a fine specimen, and, with the exception of two breaks, it is perfect. It is 6 5-8 inches long. The base is thinned down to an almost chisel-like edge. The hole is lenticular and

slightly countersunk. Axils of the barbs are squarely cut. The side showing the cellular or spongy structure is given in the figure. Both

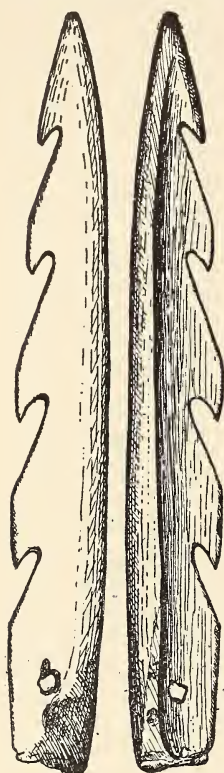


Fig. (29).

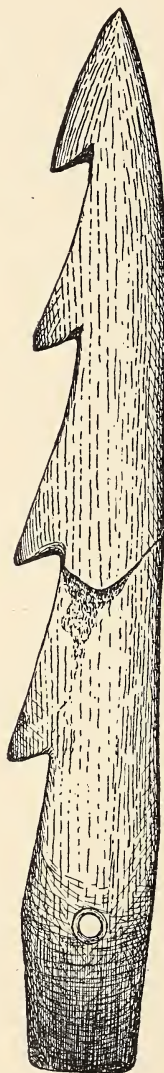


Fig. (30).



Fig. (31).



Fig. (33).



Fig. (35).



Fig. (32).



Fig. (36).



(Fig. (34)).



this and figure 23 resemble Alaskan forms in having an oblong hole very near the edge. There is a fragment of a harpoon head (25,015) in the museum which has a round hole not quite  $\frac{1}{8}$  of an inch from the edge.

Figure 28 (8,104) shows one from Eglinton, York county, which is a very neatly made specimen 6 3-8 inches long. The barbs are well made and sharp, and the axils are rounded. The thickness of the base has been slightly reduced. The tip is somewhat injured and broken.

Both sides of a very well made specimen from lot 12, concession 7, Nottawasaga township, Simcoe county, collected by Mr. F. Storry, are shown in figure 29 (26,244). It is made of bone, one side still retaining a portion of the natural hollow or marrow cavity. This makes the barbed portion less than  $\frac{1}{3}$  of an inch thick. It is nearly 3-8 of an inch thick at the back. Its length is 6 1-8 inches. The hole is very irregular, and more square than round. Some cutting has been done on the base to reduce its thickness. The barbs are slightly shouldered and are all quite sharp. The tip is not pointed, but is broad and chisel-shaped.

In figure 30 (25,053) is represented a very massive specimen made of elk horn,  $8\frac{1}{2}$  inches long and nearly 5-8 of an inch thick. The side figured shows the natural rounded surface of the horn; the lower one is flat. All the barbs are cut out square as if with a saw. Most of the barbs and the tip are quite sharp. Unfortunately, it is not known where this fine specimen came from.

For the sake of comparison with Ontario forms, we present in figure 31 (21,254) an illustration of a fragmentary harpoon, from the northeast shore of Lesser Slave lake, Alberta, Canada. This specimen must originally have been very large. Its present length is  $4\frac{1}{2}$  inches. It is made of deer or caribou horn and is very much weathered.

There is only one metal harpoon head in the Museum, and this is represented in figure 32 (9,829). It appears to have been made from an old iron knife blade. It is very much rusted. There is a small hole through the basal end. The third barb from the end is slightly shouldered. Length  $5\frac{1}{8}$  inches. It comes from Nottawasaga township, Simcoe county.

## II. BILATERALLY BARBED.

This type of harpoon head has a very wide distribution on this hemisphere, being found in use among the natives of Tierra del Fuego, and in California, British Columbia, Alaska, and among most of the Eskimo tribes inhabiting the polar regions between the latter country and the north Atlantic seaboard. Specimens of this type are also met with in Europe. The barbs on some of the British Columbian and Californian examples are large like those on harpoon heads used by the cave men of France. New York State furnishes many fine examples. Thirty of the forty-six specimens figured by Beauchamp in his Bulletin on "Horn and Bone Implements of the New York Indians" are bilateral. They resemble Ontario forms very closely. A fragmentary Hochelagan specimen represented by figure 26 in Dawson's "Fossil Men" is very much like some in the Museum here, except that the base is broader. They have also been found in the States of Vermont, Pennsylvania, Massachusetts, and Maine.

The writer was inclined to think that the bilateral type was, perhaps, the earliest form of harpoon head. Dr. Beauchamp, however, says (p. 294): "At one time it seemed probable that those with a double line of barbs were much earlier than the larger forms, but both have now been frequently found on sites not four centuries old," and further on he states that these two types have been discovered not only on the same sites, but in the same graves. Mr. George Allison, of Waterdown, Ont., has two bilateral harpoon points in his collection, which were found on the Sparks' farm, Beverley township, Wentworth county, and from the same place he also has two specimens with unilateral barbs.

There are not many bilateral specimens in the Provincial Museum. We have only the eight described in this article. They are all smaller and more slender than most of those with unilateral barbs, and the largest is but 7 1-8 inches long. There is one from near the mouth of the Humber river, York county, in the Museum of the Geological Survey, at Ottawa, the length of which is 9 inches, and this is the largest Ontario specimen known to the writer.

It is hard to say whether these were intended to be used as fixed points, or whether they were detachable from the shaft. Not one of the Ontario examples is provided with a hole. Dr. Rau found this to be the case with all the bilateral harpoon heads from the United States, in the National Museum in 1884. He said, "It probably has been noticed that these pierced dart-heads have all unilateral barbs; those with barbs on both sides, it will be seen, are not perforated, but may also, in part at least, have been detachable. Perhaps it is only owing to accident that none of the bilaterally barbed heads at my disposition is perforated."\* Dr. Beauchamp says that it is also his "experience in the examination of a great number of specimens. But one bilateral harpoon has been submitted to him with a perforation, and of this he had at first some doubts from other unusual features."†

Nearly all examples of the bilateral type in the Museum are more or less fragmentary, and it is usually the basal portion that is missing. This is found to be the case with many specimens from New York State.

Figure 33 (7,440) shows a specimen from Nonquon island, lake Scugog, Ontario county. It is made of horn. Length, 6 3-8 inches. The side shown in the illustration is round and the lower one is flat. The head of this specimen is sagittate, and there is an extra barb on one side. The base has been rubbed down to a blunt point, which is much more rounded on the under side than on the upper, as is shown in the section at the side of the figure. Collected by Dr. A. F. Chamberlain.

The bone harpoon point shown in figure 34 (7,089) was found in York county, north of Toronto. Part of the articular end of the bone is still intact, although considerably flattened by rubbing. Its length is 7 1-8 inches. There are two pair of barbs, and these are very blunt. This condition is undoubtedly due to decay. The tip is broken.

Figure 35 shows a broken bone specimen which was found by Lieutenant Geo. E. Laidlaw on lot 44, South Portage road, Eldon

\* Prehistoric fishing, p. 150.

† Horn and bone implements of the New York Indians, p. 294



Fig. (37).



Fig. (38).



Fig. (39).



Fig. (45).



Fig. (40).



Fig. (41).



township, Victoria county. This specimen has three rounded barbs on one side and only two on the other. The tip is broken. Length, 3 1-8 inches.

The well made bone head shown in figure 36 (17,118) is triangular in cross-section, one side becoming convex as it approaches the point. The under side is flat. The base has been brought almost to a point. There is a shouldered notch on each corner of the triangular base, possibly to facilitate the fastening of the line by which it was secured to the shaft. There are three pair of barbs which are all moderately sharp. The tip is also quite sharp. A small piece has been broken off one side of the basal portion, but otherwise this specimen is perfect. Length, 3 inches. It comes from Percy township, Northumberland county.

Figure 37 (8,105) shows one from lake Medad, Nelson township, Halton county. It is made of bone, and is fragmentary. Its length is 2 $\frac{3}{4}$  inches.

Another fragmentary harpoon head is shown in figure 38 (7,091). It has three pair of blunt barbs. The tip is obtuse. This specimen is made of horn, and is 4 inches long. It is from York county.

Figure 39 (21,610) represents a fragmentary bone specimen from lot 12, concession 1, Fenelon township, Victoria county. It is elliptical in cross-section near the third pair of barbs, but, as shown in the illustration, one of the round sides becomes sharply ridged as it approaches the point. The barbs are blunt, but the tip is sharp. Length, 3 7-8 inches. Collected by Lieutenant G. E. Laidlaw.

Figure 40 (8,092) shows another bilateral specimen, and this one comes from near the town of Simcoe, Norfolk county; the most westerly point in Ontario where this type has been found. There are five pair of barbs, and they are not very sharp, and all are polished. The tip is blunt. The natural longitudinal hollow on the side shown in the figure has been partly duplicated, from the tip to the last pair of barbs on the reverse side, by the primitive workman. This specimen is made of bone, and its length from the point to the fractured end is 5 7-8 inches.

### III. TOGGLE-HEADS.

Mr. Boyle's suggestion that the specimens illustrated and described below were possibly used as toggle-heads led the writer to make a study of those in the Provincial Museum. In comparing them with Eskimo examples, one is struck with the remarkable resemblance between them. A glance at the two toggle-heads selected from the Eskimo collection in the Museum, shown in figures 41 and 42,\* will convince one that our specimens were used for the same purpose, and a comparison with some of the many figures given by Mason in his "Aboriginal American Harpoons" would strengthen this impression. The writer was surprised to read that similar specimens had been found in Europe. Figures 43 and 44, taken from Keller's "Lake Dwellings of Switzerland," show two specimens from a lake dwelling on Laibach Moor, Austria, which resemble the Ontario and

\* Fig. 41 (22,188) is from the mouth of the Mackenzie river, and was collected by Rev. C. E. Whitaker. It is part of a harpoon used for spearing the white grampus. The one shown in fig. 42 (23,600) was obtained from the natives of Herschel island by the Rt. Rev. I. O. Stringer. It has two pairs of barbs. Both specimens are provided with steel blades.

Eskimo forms very much. They are thus described by Ed. Freih. von Sacken: "Pieces of antlers cut off diagonally, regularly sharpened, perfectly polished, and with a well-bored hole in the middle. Four specimens were found from 3 1-8 to 4 inches in length. The holes are bored in different positions, figures 14 and 20 [on pl. clxviii].\* Some people have thought them to be the tops of gaffs, or fish spears, but from their excellent workmanship they probably are ornaments."†

The toggle-head harpoon is much more complicated than the barbed type. Figure 45 (22,187) shows an Eskimo model of one of these harpoons, from Herschel island. It consists of three parts, the head, the loose shaft, and the wooden shaft. When an animal is struck with this instrument the loose shaft is withdrawn in order to allow the head to toggle under the skin. It was only among the Eskimo that the loose shaft was employed; the Nascopie Indian harpoon has none, and those of the Pacific Coast Indians from California northward also lack this feature.\* Our specimens were, no doubt, also used without the loose shaft, as nothing resembling this portion has ever been found in Ontario; and this leads us to think that possibly our Indians obtained the toggle-head idea from the Nascopies, rather than from the Eskimo.

The toggle-head, from lot 1, concession 6, Orillia township, Simcoe county, shown in figure 46 (26,960) is a well preserved specimen. It is slightly more than 4 inches long, and  $\frac{3}{4}$  wide at the butt end, and is made of deer horn. The socket hole is 1 5-8 inches deep, and opens into the line hole, which was bored from both sides. There is the beginning of another perforation above this one, but a little to one side. It appears to have been the intention of the maker, at first, to have the line hole here, but for some reason or other, possibly because it was not in line with the barb, the boring of the hole was not completed. Another beginning was made below this one. There is a notch above the largest of these holes, near the butt end. Perhaps the maker intended to shorten the main portion of the head, so as to make the barb or spur much longer. The spur is 3-4 of an inch long, and is quite sharp. The whole specimen is considerably polished.

Figure 47 (25,592) represents an unfinished specimen of deer or elk horn. A conical hole  $\frac{1}{2}$  inch deep has been bored into the basal end. The spur is moderately sharp and bends slightly outward. The butt end has been whittled off with a slight incurve. Near the base are several kerfs or cuts made with an axe or other sharp cutting instrument. The point is whittled. Length,  $4\frac{3}{4}$  inches. It comes from the Sealey farm, Brant county.

The specimen shown in figure 48 (8,093) is from block A, Indian Reserve, Otonabee township, Peterboro' county. It is  $3\frac{1}{2}$  inches long, and is made of a deer horn tip. The depth of the socket hole is 1 5-16 inches, and it extends a little beyond the line hole, as is represented in the figure by the dotted lines. In this example the lateral hole is bored in a different position. There is a shallow groove around the butt end. The spur is not very sharp. This specimen is very much weathered for over half its length, but the pointed end is still quite smooth and polished.

\*Our figures 43 and 44.

†P. 610, Vol. II.

‡For descriptions see Mason, Powers and Schoolcraft.

In figure 49 (21,630) we have a specimen with two spurs. The kerf or notch on the side of one of these spurs leads one to think that the maker intended to remove it. The socket hole has been scooped out to a depth of  $1\frac{3}{4}$  inches. The line hole is lenticular in shape and



Fig. (42).



Figs. (43 and 44).



(Fig. 46).

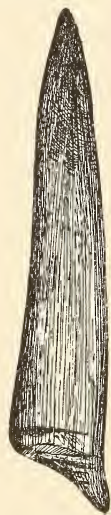


Fig. (47).



Fig. (48).



Fig. (49).



(Fig. 50).



Fig. (51).

is countersunk on both sides. Length, 3 3-16 inches. It comes from lot 12, concession 1, Fenelon township, Victoria county.

Mr. H. A. Dean, of Toronto, kindly permits me to figure a specimen in his collection, from Tiny township, Simcoe county. It (figure 50) is much more slender than any of our specimens, and differs also



in not having the line hole drilled entirely through. It only goes as far as the socket hole. A piece has been broken out of the butt end, and this makes it somewhat gouge-like, but there is evidence of use subsequent to the break. Possibly the specimen was originally an arrow point, the break making it necessary to drill the hole so as to attach it more securely to the shaft. It is altogether likely, however, if the other specimens were used as toggle-heads, that this one was also employed as such. It is considerably polished. Length,  $3\frac{1}{2}$  inches.

The writer is also indebted to Dr. Beauchamp for permission to reproduce a sketch of his figure 79, representing an Iroquoian specimen from New York State, in figure 51. He says, "It is hollow and pointed, but the large perforations add new features. These are not opposite, nor is the base cut straight across as in the arrowheads. Its size is another thing, and it may have been intended for a dagger or a spear. It is from the Minden or Otsungo fort, and is of horn." He describes another specimen, which may also be a toggle-head: "Figure 108 is another fine example, smaller, but having much the same character. The base is neatly cut across, but is now gougelike on one side. The implement is of hollow horn, quite sharp, and perforated from side to side. . . . This was found at Brewerton by Dr. Hinsdale."\*

#### CONCLUSION.

The accompanying map of the central and western portions of Ontario, gives the geographical distribution of the different types of harpoon heads contained in the Provincial Museum. By correspondence with collectors, in parts of Ontario not represented in the Museum by specimens, additional data were obtained, but much more information is desired.

It will be observed that there are large portions of the Province where no harpoon heads have been found. It seems strange that in the more easterly counties none have been discovered. One would think that, owing to the large number of small lakes dotting the country between the Ottawa and the St. Lawrence, there would be ample scope for piscatorial operations, and that harpoon heads would also be numerous. As far as can be ascertained, not one has been found in the Province farther west than the town of Simcoe, in Norfolk county. One was found at Fort Wayne, Michigan (*vide ante* p. 38, footnote) which, although beyond our borders,† we have indicated on the map. No harpoons have, so far, been discovered in the Niagara peninsula. Mr. George Oliver, of Jordan Harbor, Lincoln county, says he has never heard of any harpoon heads being found, although net sinkers are very abundant, which shows that net fishing was the principal means of capturing fish.

The different types are somewhat generally distributed. The unilateral specimens with single barbs are more numerous in the counties of Brant and Wentworth, some village sites in the former county being unusually prolific, nine specimens coming from one place alone. The multiple and bilaterally barbed heads, however, are not so plentiful in this part of the Province as they are farther

\* Pages 291-292, "Horn and Bone Implements of the New York Indians."

† There were three or four towns of the Neutrals or Attiwandarons on the western side of the Detroit river.

eastward. Mr. G. J. Chadd, of Trenton, who has a large collection of Indian relics from Prince Edward county, writes that he has found the three types in Hallowell and Ameliasburg townships. It is possible that they may yet be met with farther east than this. The toggle-head specimens occur in widely separated localities.

Our specimens were nearly all found within the territory formerly occupied by the Attiwandaron, Tionnontate and Huron tribes of the Huron-Iroquois stock. In New York state the finds are also confined to the region once inhabited by the "Five Nations." Dr. Beauchamp says: "Few have been reported west of the Genesee river, and along the Susquehanna and Delaware they seem unknown.\* According to Prof. O. T. Mason, "Both kinds (unilateral and bilateral) are most plentiful at the inlet of Onondaga lake, the outlet of Oneida lake, and near Chaumont bay, in Jefferson county. . . . The counties in New York yielding barbed harpoons are Jefferson, Montgomery, Madison, Cayuga and Livingston.†

Finally, as to the prehistoric or modern character of these harpoon heads, there can be no doubt that most of them were made during post-European times. Those from Brant county, especially, are not prehistoric, for they have been cut out with metal tools, and some from York county appear to have been made in the same way. Moreover, the specimens from the Sealey farm were found associated with such relics of European manufacture as iron tomahawks, brass kettles, glass beads, etc. This, however, does not necessarily imply that the harpoon was introduced by the whites. On page 328 of his Bulletin, Beauchamp says: "The Iroquois made the unilateral harpoon of bone long after the whites entered New York, and the bilateral to some extent." He regards the unilateral head as "a recent form when of large size." The specimens from Brant county are nearly all much larger than most of those found farther eastward in Ontario. There can be no question as to the age of the harpoon heads taken from the Miller mounds near Rice Lake, as nothing suggestive of European contact was found by Boyle in these mounds. The bilateral specimen from Nonquon, or Noncon island, lake Scugog, might also be prehistoric, for no European relics were found with it; and even some of the other bilaterally barbed heads may have been used before the advent of the whites.

#### ACKNOWLEDGEMENTS.

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### THE MAKING OF A CAYUGA CHIEF.

Early last May I was honored with a special invitation from the Cayugas of Tuscarora Township, to be present at the ceremonies connected with the making of a chief. Having formed somewhat lofty conceptions with respect to this ceremony, from the elaborate description which is given of it in Hale's *Book of Rites*, I fully anticipated the seeing and hearing of much that would correspond with his record.

Men, women and children, to the number of about fifty, met about two o'clock in the afternoon in the Cayuga longhouse, a very neat and commodious, though plain, building, within a short distance of the Six Nations post office. The men immediately concerned occupied the south-east corner of the building, and the proceedings began with the singing of a song by one of the chiefs slowly pacing meanwhile, east and west. This he continued for about twenty minutes, being seldom interrupted by responses from the others present. The music was not exhilarating by any means, and the frequent repetition of "Hi, hi," was especially noticeable. After one or two short addresses from other members of the tribe, a procession was formed in a very irregular sort of way, and set out for the Onondaga longhouse, about two miles distant. One was appointed to sing, and he kept up his song for fully half the distance, when another took his place. When within a few hundred yards of the Onondaga longhouse, we reached a point where an old stump by the roadside had been set on fire. Here a pause was made, and several of the leading men addressed those present, after which the procession was re-formed, and proceeded to the Onondaga building. By this time the audience had increased to nearly 150, so that the seats in the longhouse were uncomfortably filled, and a great many visitors had to remain standing, both inside and outside, close to the door. When everything was ready, one of the officials began to sing, walking backwards and forwards from end to end (east and west) of the longhouse, as far as he could do so on account of the large number of persons present, and what must have rendered his performance unusually fatiguing was the fact that the music was in no wise what could be called a march, for the steps did not keep time with the notes. This song was kept

up for nearly an hour and a half, and it is needless to say the "Hi, hi's"—which are said to signify 'attend' or 'take notice,' or 'hail, hail,'—formed a prominent part of the performance; on the conclusion of which the usual feast was indulged in.

Those in the longhouse, with few exceptions, seemed to be deeply impressed with the solemnity of the ceremony, and there was not the ghost of a sign of any impatience from the beginning to the end of all that took place.

It is needless to say that, after reading the highly, but probably not too highly, colored description already referred to, in the Book of Rites, the performance was extremely disappointing.

Most of the men and women present were dressed in their best; perhaps all were, but there were a few who did not seem to regard the occasion as one deserving of special significance, ceremonially. We must, however, bear in mind that the rites of the younger nations, of which the Cayugas are one, were not at all so elaborate as were those of the older nations.\*

As it may interest some readers who have not easy access to the Book of Rites, to see Hale's translation of the ceremony of the younger nations, it will be found following this.

#### THE OLD WAY OF MAKING A CHIEF.

##### *From The Book of the Younger Nations.*

1 (a). Now—now this day—now I come to your door where you are mourning in great darkness, prostrate with grief. For this reason we have come here to mourn with you. I will enter your door, and come before the ashes, and mourn with you there; and I will speak these words to comfort you.

1 (b) Now our uncle has passed away, he who used to work for all, that they might see the brighter days to come—for the whole body of warriors and also for the whole body of women, and also the children that were running around, and also for the little ones creeping on the ground, and also those that are tied to the cradle boards: for all these he used to work that they might see the bright days to come. This we say, we three brothers.

1 (c) Now the ancient lawgivers have declared—our uncles that are gone, and also our elder brothers—they have said it is worth twenty—it was valued at twenty—and this was the price of the one who is dead. And we put our words on it (*i.e.*, the wampum), and they recall his name—the one that is dead. This we say and do, we three brothers.

1 (d). Now there is another thing we say, we younger brothers. He who has worked for us has gone afar off, and he also will in time take with him all these—the whole body of warriors and also the whole body of women—they will go with him. But it is still harder when the woman shall die, because with her the line is lost. And also the grandchildren and the little ones who are running around—

\* The three elder nations consisted of the Caniengas or Mohawks, the Senecas and the Onondagas. The younger ones are the Oneidas, Cayugas and Tuscaroras. The Delawares, Tuteloos and Nanticokes were also included among the latter. The Tuteloos are now extinct, and the Nanticokes and Delawares are not numerous.

those he will take away; and also those that are creeping on the ground, and also those that are on the cradle-boards; all these he will take away with him.

1 (e). Now then another thing we will say, we three brothers. Now you must feel for us; for we came here of our own good-will—came to your door that we might say this. And we will say that we will try to do you good. When the grave has been made, we will make it still better. We will adorn it, and cover it with moss. We will do this, we three brothers.

2. Now another thing we will say, we younger brothers. You are mourning in the deep darkness. I will make the sky clear for you, so that you will not see a cloud. And also I will give the sun to shine upon you, so that you can look upon it peacefully when it goes down. You shall see it when it is going. Yea, the sun shall seem to be hanging just over you, and you shall look upon it peacefully as it goes down. Now I have hope that you will yet see the pleasant days. This we say and do, we three brothers.

3. Now then another thing we say, we younger brothers. Now we will open your ears, and also your throat, for there is something that has been choking you, and we will also give you the water that shall wash down all the troubles in your throat. We shall hope that after this your mind will recover its cheerfulness. This we say and do, we three brothers.

4. Now then there is another thing we say, we younger brothers. We will now remake the fire, and cause it to burn again. And now you can go out before the people, and go on with your duties and your labors for the people. This we say and do, we three brothers.

5. Now also another thing we say, we younger brothers. You must converse with your nephews; and if they say what is good, you must listen to it. Do not cast it aside. And also if the warriors should say anything that is good, do not reject it. This we say, we three brothers.

6. Now then another thing we say, we younger brothers. If any one should fall—it may be a principal chief will fall and descend into the grave—then the horns shall be left on the grave, and as soon as possible another shall be put in his place. This we say, we three brothers.

7. Now another thing we say, we younger brothers. We will gird the belt on you, with the pouch, and the next death will receive the pouch, whenever you shall know that there is death among us, when the fire is made and the smoke is rising. This we say and do, we three brothers.

7 (b). Now I have finished. Now show me the man!

#### INDIAN ADOPTION.

Before leaving this subject, it may not be quite useless to repeat what has been said on former occasions in our reports, viz.: that the adoption or complimentary receiving of white people into Indian brotherhood has no reference whatever to the “making” of such white people “chiefs.”\* It is a mere act of courtesy affair, and the ceremony

\* On rare occasions the Indians themselves speak of making a man an “honorary chief,” but, as far as I can make out, there is no ancient warrant for this use of language; the ceremony corresponds to giving one the freedom of a city, or making him a Burgess now-a-days, which is very different from making him a councillor, or an alderman, or a bailie.



may be longer or shorter, as the Indians themselves determine, according to circumstances. Sometimes the ceremonial proceedings do not occupy more than a few minutes, and consist mainly in giving the person adopted a new name, and greeting him as a brother. At other times, short or long speeches are made. As the writer was adopted on Queen's Birthday (1892), when fully one thousand persons representing all the "nations" were present on the Ohsweken fair grounds, and as he is not aware that any description of such a ceremony has ever been written in detail, it may interest some readers to know just what is done on occasions of this kind. After several eloquent Indian speakers had addressed the crowd on the subject of loyalty to the "Great-Mother-across-the-big-lake," the proposed recipient of Indian honor was informed by Chief Dekanonraneh (a Canienga) that the people had decided to "make" the writer an Indian, and that he was to prepare himself for what was to follow. What did follow was the making of some more speeches by some half dozen chiefs, in which the audience was informed of what the writer had done for the purpose of investigating the former and present condition of Indian life, and stating to them that the old men of the various nations had determined to give him an Indian name, and ever afterwards to regard him as one of themselves. On being asked to express their opinion on this matter, the answer came in the form of a loud and somewhat prolonged whoop signifying approval. Several chiefs were directed to assist Skanawati (On-the-other-Side-of-the-River), commonly known as John Buck,\* to act as master of the ceremonies, which were conducted on the platform erected for the Queen's Birthday speech-making. Skanawati himself then delivered an oration, part of which was given while grasping with his right hand the left hand of the candidate as they faced the people; after this there was a pause, during which the choice of a name was left to the old women of the assembled nations. This name was communicated to the candidate through Skanawati, who informed him that hereafter he would be known to the Indians as Ah-e-wa-no-neh, and Dekanonraneh translated this to signify "one who is sent on tribal business," or, as he added with a smile, "an ambassador."

It may be mentioned here that none of the "Nations" use the letter "r" very much, if at all, except the Mohawks or Caniengas, who are regarded as the oldest people of the confederacy; and as the about-to-be-made-Indian, on being asked to select his tribe, chose to become a Canienga or Mohawk, he was informed that on this account his name would take the form of Rah-re-wa-no-neh. He was also requested to choose his totem, and took that of the turtle.

The proceedings wound up with a few more speeches, followed by almost interminable hand-shakings.

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#### EUROPEAN CONTACT AND THE INTRODUCTION OF DISEASE AMONG THE INDIANS.

When the Jesuit and other early Canadian missionaries visited various sections of this Province, they were very much annoyed to learn that, in many cases, the natives to whom they had ministered in other districts, took great pains to spread the report that wherever

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\* He was "Fire Keeper" of the Six Nations, and, as a matter of course, an Onondaga. The Fire Keeper's chief duty is to preserve and interpret the wampum records of the people.

the missionaries had hitherto been, many of the people became ill, and not a few of them died. Naturally enough the fathers concluded that such rumors were originated and disseminated for "diabolical" purposes. Being in perfect health themselves, they were utterly unconscious of blame with respect to the carrying of contagion, and on doubt were firmly of the belief that the Indians were not speaking truthfully in attributing to them, the cause of so much illness and of so many deaths.

More recent observation has shown that in the making of such statements the Indians were, in all probability, confining themselves to fact. About seventy years ago, when a committee of the British House of Commons was appointed to investigate the condition of the aborigines in the Colonies of the empire, the following evidence was given by the well-known and universally respected missionary, the Reverend John Williams, as well as by others.\*

"Q. Do you ascribe the diminution of the population of the Pacific Island groups to our people having introduced among them European vices and diseases?

A. Undoubtedly; but the very circumstance of coming in contact with Europeans will introduce a disease among the people; mere common intercourse, without introducing any vicious habits among them. I have known several instances of that.

Q. Do you mean the diseases of vice?

A. No; there is an island called Oparo or Rapa, about 1,000 miles south-east of Tahiti, where a disease was introduced by a ship, which I do not attribute to any vicious conduct on the part of the crew; but a disease was introduced there which reduced the population above half.

Q. What was the disease called?

A. I do not know; but it took the natives off with astonishing rapidity; a kind of fever; it seized them in their heads, they became delirious, and died in a very short time.

Q. Do you ascribe those effects to the commixture with native blood?

A. No; it is a very singular fact, that the mere circumstance of a ship's coming has in many instances brought diseases to the islands from South America and other parts.

Q. Do you mean that those were ancient European diseases, or were they engendered by the mere intercourse of the ship's crews, and the natives in a manner which you cannot account for?

A. Yes; it appears that the bare social intercourse† between the ship and the natives, produces a disease among the natives which carries them off in the way that I have described. It created a great sensation, and there was an investigation into it; the natives called it by the same term that they use for a musket, and we thought that this ship had been firing upon them, and we enquired into the affair,

\* From "Evidence on the Aborigines, given before a Committee of the House of Commons," (Imperial) 1833-5. (published 1837) pp. 290-2.

†The Blackfellows of the Australian bush seem to have had some inkling of this "mysterious agency," as Mrs. K. Langloh Parker\* informs us that "in olden times even to smell a stranger was considered a risk." As the immediately preceding references are to white people, we may infer that the word "stranger" here means a white man. In any case the natives had observed the serious results of contact with *outsiders*.

\*The Ewahleyi Tribe, a Study of Aboriginal Life in Australia, by K. Langloh Parker, with an Introduction by Andrew Lang. Pp. 126.

but it was no such thing; a disease was introduced by which the people were carried off in great numbers.

Q. Are you aware that any medical investigation has ever been instituted into this very extraordinary fact?

A. No; we had no medical men among us, but it is a fact that can be substantiated by every missionary upon the island of Tahiti.

Q. Do you know whether the persons that came there were laboring under anything that would be considered an epidemic; and that they would have been liable if they had gone to any other place where the inhabitants were Europeans, to have communicated disease.

A. No; my conviction is this, that had they come to the island where I was residing nothing would have resulted. But there is a certain something in the first intercourse between Europeans and natives that introduces disease on the part of the latter. I do not know what it is, but that is a fact."

Darwin, in his *Journal of a Voyage in the Beagle* \* refers to what he calls this "mysterious agency" and adduces several examples of its equally mysterious results, not only among human beings, but among lower mammals in different parts of the world.

"Besides these several evident causes of destruction," he says, "there appears to be some more mysterious agency generally at work. Wherever the European had trod, death seems to pursue the aboriginal. We may look to the wide extent of the Americas, Polynesia, the Cape of Good Hope, and Australia, and we find the same result. Nor is it the white man alone that thus acts the destroyer; the Polynesian of Malay extraction has in parts of the East Indian Archipelago, thus driven before him the dark-colored native. The varieties of man seem to act on each other in the same way as different species of animals—the stronger always extirpating the weaker. It was melancholy at New Zealand to hear the fine energetic natives saying, that they knew the land was doomed to pass from their children. Every one has heard of the inexplicable reduction of the population in the beautiful and healthy island of Tahiti since the date of Captain Cook's voyages: although in that case we might have expected that it would have been increased; for infanticide, which formerly prevailed to so extraordinary a degree, has ceased, profligacy has greatly diminished, and the murderous wars become less frequent. The Rev. J. Williams, in his interesting work, says, that the first intercourse between natives and Europeans, "is invariably attended with the introduction of fever, dysentery, or some other disease, which carries off numbers of the people." Again he affirms, 'It is certainly a fact, which cannot be controverted, that most of the diseases which raged in the islands during my residence there, have been introduced by ships;† and what renders this

\*Pages 411-12. Ward Lock & Co., London, New York and Melbourne.

†"Capt. Beechey states that the inhabitants of Pitcairn island are firmly convinced that after the arrival of every ship they suffer cutaneous and other disorders. Captain Beechey attributes this to the change of diet during the time of the visit. Dr. Macculloch says, 'It is asserted, that on the arrival of a stranger (at St. Kilda) all the inhabitants, in the common phraseology, catch a cold.' Dr. Macculloch considers the whole case, although often previously affirmed, as ludicrous. He adds, however, that 'the question was put by us to the inhabitants, who unanimously agreed in the story.' In Vancouver's Voyage, there is a somewhat similar statement with respect to Otaheite. Dr. Dieffenbach, in a note to his translation of this Journal, states that the same fact is universally believed by the inhabitants of the Chatham islands, and in



fact remarkable is, that there might be no appearance of disease among the crew of the ship which conveyed this destructive importation.' This statement is not quite so extraordinary as it at first appears; for several cases are on record of the most malignant fevers having broken out, although the parties themselves, who were the cause, were not affected. In the early part of the reign of George III, a prisoner who had been confined in a dungeon, was taken in a coach with four constables before a magistrate; and, although the man himself was not ill, the four constables died from a short putrid fever; but the contagion extended to no others. From these facts it would almost appear as if the effluvium of one set of men shut up for some time together was poisonous when inhaled by others; and possibly more so, if the men be of different races. Mysterious as this circumstance appears to be, it is not more surprising than that the body of one's fellow-creature, directly after death, and before putrefaction has commenced, should often be of so deleterious a quality, that the mere puncture from an instrument used in its dissection should prove fatal."

Even at this date it is only right to vindicate the honor, in at least one respect, of the simple-minded old Ouendat,\* or Huron, who evidently told the simple truth as he understood it, and he understood it right, without knowing why any more than we do ourselves.

A good many years ago on meeting with Darwin's reference to the St. Kilda health conditions as above quoted, I mentioned the matter to my old and deeply respected friend Mr. John McLean, then Division Court Clerk in Elora, Wellington County, Ontario, perhaps mainly because he himself was not only a Highland Scotsman, but a man of wide information and more than ordinary intelligence. He was much pleased to see the subject referred to by so high an authority and stating that he had had a little of this experience in the Northwest himself, he looked up a passage in one of his own volumes, "Twenty-five years in Hudson Bay Territory," in which he speaks of certain Indian villages that were almost or entirely depopulated by the death of the natives from "*acute influenza*," I think he said to me, and he asks in his book, "What can be the cause of it? There has been no rum or small pox." Quoting this passage, which shows the open mindedness of the writer, I very deeply regret that the Rev. Mr. Morice has expressed himself in very deprecatory terms more than once in his latest book, "History of the Northern Interior of British Columbia," with regard to my old friend, Mr. McLean, who, in the opinion he wrote as above, simply felt as Darwin did that the health conditions were "mysterious," and as did also the great mis

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parts of New Zealand. It is impossible that such a belief should have become universal in the northern hemisphere, at the Antipodes, and in the Pacific, without some good foundation. Humboldt says, that the great epidemics at Panama and Callao are 'marked' by the arrival of ships from Chile, because the people from that temperate region first experience the fatal effects of the torrid zones. I may add, that I have heard it stated in Shropshire, that sheep, which have been imported from vessels, although themselves in a healthy condition, if placed in the same fold with others, frequently produce sickness in the flock."

\*The Wyandots, after the arrival of the 'Black Robes' saw many of their kith and kin take their departure through the Land of the Little People to the Great Northern Cave. To what other conclusion could t(he)y come than that the presence of the missionaries and the ailments of his tribe had some connection

Even the missionaries were quite unconscious as to the existence of bacteria and bacilli!

sionary of the South Pacific Islands, the Rev. John Williams, that the sickness was inexplicable, although he was quite sure it did not arise from the white *contagion* or *contamination*, as these words are commonly used.

Having known Mr. John McLean quite intimately for many years I cannot express myself too strongly by way of clearing his memory from the wholly gratuitous aspersion cast upon it by the Rev. Father Morice, of irreligiousness.

After quoting an account given by a diligent young priest, (Fr. Demers), relating to the immorality of the Carrier Indians, the Rev. A. G. Morice proceeds, that there is nothing exaggerated in this sombre picture, "the description given of the Carriers or Tekallies, by Mr. Demers," is attested by John McLean, who *little religious* as he seems to have been, wrote four years later. "The influence of the men of medicine, who strenuously withstand a religion which exposes their delusive tricks and consequently deprives them of their gains,—together with the dreadful depravity everywhere prevalent—renders the conversion of the Tekallies (Carriers) an object most difficult to accomplish." It would not be easy for any unprejudiced reader to find in this commendation of Catholic missionary work among the Carrier Indians, in the face of so many difficulties, anything to indicate a lack of religion. On the contrary, Mr. McLean's plain intention was to give the missionaries credit for what they had been able to accomplish among a people so depraved.

I can only say that whatever may have been the degree of non-sanctity that characterized Mr. McLean in those years, he never showed any evidence of such gross destitution of what Father Morice seems to regard as "religion" in his more advanced life. As far as is generally known, he was a Presbyterian in "good standing," regular in his attendance on "the means of grace," as church phraseology puts it and was wholly an exemplary man. In his conversation there was never the least betrayal of early "little religiousness," indeed he was looked upon by everybody as a "perfect gentleman." He was not a pious palaverer—not given to much speaking, but by no means was he an unthinking religionist, and would just as readily pass judgment on at pulpit crudity or insane platitude, as on a newspaper paragraph, or the vaporings of village gossip, which every one of his countrymen claims a prescriptive right to do, and exercises accordingly.

Whatever the conduct or utterances of Mr. McLean may have been which gave umbrage to the Rev. Mr. Morice does not appear, and as Mr. McLean's book was based on a state of affairs existing before or about the time that Father Morice was born, it is certainly somewhat a matter of wonder that the Reverend gentleman should speak of Mr. McLean as he does. Most assuredly John McLean did not lavish praise on Hudson's Bay Company's people—he has not given to this kind of language, and was no doubt a fault finder, or rather one who would not hesitate to point out faults when they existed, and it would be folly to contend that there were no faults in the management of the Company then, as well as at many other times, both before and since.

However, this may have been, knowing the man as I did. I cannot but take this opportunity to resent what I call Father Morice's



reflections on him. But as Mr. McLean is probably yet alive (he was until very recently, at over ninety years), and in British Columbia, there must be many of the Rev. Father Morice's neighbors, who can attest to the correctness of my estimate of the good old Argyllshire gentleman, whose memory is revered by so many who knew him and to whom this Dominion owes much more than it can ever repay, even if it would.

It is very pleasing to be able to vindicate to a very small extent, the character of my old friend, and to adduce his experience in proof of Darwin's contention, that disease of the kind under consideration is "very mysterious." Mr. McLean did not jump at conclusions. He observed closely and his observations forced upon him the conviction that the disease which was depopulating Indian communities was something unaccountable, something science had not yet recognized, and instead of saying, "Oh, it's easy enough to understand this—I know all about it, just as any one may, who knows how these people live," he *thinks* a good deal and comes to the conclusion that he cannot make it out at all. Admirable, canny old Scot. He asks himself, "What can be the cause of it? There has been no rum, no small-pox, no other disease that I can see or trace and yet the people die." This surely was laying no unholy imputation at the door of the missionaries, or even of their attendants, and should further proof be necessary to show that this so-called, unreliable irreligious and in every way bad man, John McLean, did not at all correspond with the statements made concerning him, by the author of the History of the Northern Interior of British Columbia, it may not be out of place to state that just about the time when he may be supposed to have been conducting himself so irreligiously and laying the foundation for being charged with want of reliability, he undertook a voyage to see his mother after an absence of sixteen years from "Home." He sailed from York Factory in a small sloop laden with fish-oil, and arrived at Plymouth after a remarkably quick passage and from that town he walked to Benmore in Argyllshire. On it being remarked to him that he had certainly made a dangerous and adventurous trip, his reply was, "I knew something about the vicissitudes before I left York Factory, but what would a son not do to see his mother, after an absence of sixteen years?" If this was not an example of the kind of piety that so often passes for religiousness it surely was filial piety.

It is not easy to believe that my respected friend, the Rev. Fr. Morice, would wittingly detract from the character of any worthy man and after examining the History of the Northern Interior of British Columbia with more than usual care, the conclusion seems inevitable that the author has confused my old friend with some other, and less worthy representative of the clan, *e.g.*, on page 171 we find, "A young man," writes Ogden, by name McLean . . . his father was killed in Red River . . . is in the Snake Country. Then Mr. Morice proceeds, "This single line gives us a clue to the innate disposition of the future New Caledonian. His father died a violent death; he was himself to meet with a similar fate, and most of his children were to die on the gallows—a doomed family indeed!" It seems quite certain that this can not by any possibility refer to John McLean, the author of "Twenty-five years in the Hudson's Bay



Company." I knew his son, John, very intimately, whose mother was an Indian, and never heard a whisper about any others he may have had, but as a matter of course it may be said that neither young John nor his father would be likely to mention that others of the family had died as Father Morice asserts, but I do know that that author did not meet his death in any such way, for I clearly remember seeing him when he left Ontario to spend the last of his years with a son-in-law, a well known legal practitioner in Victoria or Vancouver, B.C., where, for aught I know, he is yet living, and if so must be fully one hundred years old. His son, already mentioned, and his two extremely beautiful and refined daughters—the two latter in B.C.,—will no doubt be quite surprised to learn how suddenly and shamefully their father passed away, while they suppose they saw him die in the house of his son-in-law, without the ghost of any capital crime being suspected. It would therefore appear plain, that the reverend author of the "Northern Interior of British Columbia," has confounded two McLeans of totally distinct character, or else the references to them, in his book are so collocated as to lead readers to confound them. Either supposition although both are unfortunate is more charitable than the ascription of intentionally malicious treatment, by the Rev. A. G. Morice, treatment of which it is quite certain, the reverend historian is wholly incapable.

Before the above was printed a typewritten copy of it was sent to the Rev. Mr. Morice from whom I have received the following reply. I am still of the belief that the Rev. gentleman's volume is likely to throw discredit on the memory of John McLean, my old friend, who was not at all a man of the kind indicated.

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#### JOHN McLEAN AND FR. MORICE'S "HISTORY OF THE NORTHERN INTERIOR OF BRITISH COLUMBIA."

Mr. David Boyle is to be congratulated on the lasting character of his friendships such as is exemplified by the stand he takes against me, or rather two words of my "History of the Northern Interior of British Columbia," in connection with his "old and deeply respected friend Mr. John McLean." But, as usually happens when sentiment is too much in evidence, his judgment in this particular case is somewhat warped by the heat of his heart. On the other hand, if there is in the world a person who, to fulfill properly his mission, must be without likes or dislikes, I hold that this is the historian, and, conversely, the party who is the least apt to judge impartially is the "old friend."

Yet I confess that, in trying to answer Mr. Boyle's charges, I am at a disadvantage, inasmuch as many of those who may chance to read these lines, not knowing me personally, will be tempted to take into consideration rather the cut of my cloth than the weight of my reasons. Had my honourable opponent chosen another ground than an incidental remark bearing on a religious point on which to build his criticism, I would be quite at ease, as I am even now with regard to those people whose personal acquaintance I enjoy, and who know that I look on nothing with so much abhorrence as intolerance and bigotry. Indeed I do believe that if the incriminated history has found such favour with the reading public that a third

edition of it had to be printed within little more than a year of the first, this is due mostly to the author's lack of religious bias and general impartiality. As the reader is not bound to take my word without proof, I must be allowed to introduce myself with some sort of testimonials from disinterested parties. In order to show Dr. Boyle that I could not possibly have exercised the slightest influence over those who thus freely acknowledge my religious tolerance, I will choose only two taken from papers published at his door. Referring to the denominational subjects, I mention, the Toronto "News" wrote (16th July, 1904): "It is evident that the writer *justly* prides himself on his fairness and moderation." And again: "This characteristic is well brought out in his account of the work done respectively by the Protestant Highlander Alexander MacKenzie and the Catholic Highlander Simon Fraser." The same day the Toronto "Globe" printed the following: "The strongest impression produced by a perusal of this book is that of the fairness of the author in his treatment of themes usually approached with bias and handled with partizanship."

I think this is plain and to the point. Mr. Boyle himself is kind enough to recognize that I am "wholly incapable" of "intentionally malicious treatment" of a subject." Yet he "cannot express himself too strongly by way of clearing Mr. McLean's memory from the wholly gratuitous aspersion cast upon it" by me. He further refers to the "gross destitution" of religion which I attribute to him. Finally he wonders what the "conduct or utterances of Mr. McLean may have been that gave umbrage" to me and caused words from me which he must "resent," and from which "it is very pleasing to be able to vindicate" his friend.

In the first place, let me state that Mr. Boyle's warm heart has caused him to see a mountain where there is hardly more than a mole's hill. For, after all, what is my crime? Simply this: I show that John McLean, "little religious as he seems to have been," corroborated in his work the dictum of a Catholic priest! I never accused him of irreligiosity. I never even said that he was a "little religious." I simply remarked quite incidentally that he *seems* to have been, not irreligious, but little religious. How do I know that? exclaims Mr. Boyle. "As Mr. McLean's book was based on a state of affairs existing before [I] was born, it is certainly somewhat a matter of wonder that [I] should speak of Mr. McLean as" I do. This remark, under the pen of such an experienced writer as my honourable adversary, surprises me more than I can say. Does he suppose for a moment that, to be a reliable historian, you must have lived with the prime actors in the events you narrate? If so, pray let him quote a single reliable historian. Does he not know that for twenty years I have lived with people, some of whom have known his friend quite intimately? Is he not told in my Preface and can he not see throughout the book that, when I wrote it, I had at my disposal numberless unpublished documents dating more than twenty years before and after the appearance of his friend's own work? But I did not need these to form an opinion. McLean's "Notes of a Twenty-Five Years' Service" were quite enough for me, and though I protest that I have no intention whatever of further hurting Mr. Boyle's feelings, I fear that I cannot clear myself from what I con-

sider his uncalled for attack without entering into some details which must be more painful to him than the innocent incidental phrase of which he complains.

In the first place, is it a token of deep religious feeling to start an intrigue with "two very pretty young daughters," without minding the harm that may result for the heart of the maidens, as he confesses (p. 37) that he did with one of his friends? Is it evidence of much religion to stamp (p. 41) as "mummeries" the sacred ceremonies of the three-quarters of Christians? or to be constantly jeering at the "so-called Christian Indians" (p. 186), whom, though he knows them to be "immoderately fond of ardent spirits" (p. 188), he furnishes with so much liquor that one of them dies of it (p. 89), a circumstance which does not prevent him from giving afterwards "a small keg to the chief," who, of course, immediately gets drunk on it? Mr. Boyle may think differently, but I hold that his friend would with advantage have omitted his ever-recurring flings at the ministers of by far the most important Christian denomination. Nor can I bring myself to see much religion in his [McLean's] uncalled for statement that he "never had any great reverence for the (so-called) successors of St. Peter" (p. 209), meaning thereby, not the Popes of Rome, but the Catholic priests in general. Who ever called them so? Moreover, I hold that a truly religious man, who is not a bigot, must respect a Christian minister, to whichever sect he may belong. I respect Presbyterian clergymen, and I am proud to say that, on the very day when I received intimation of the displeasure I had caused in Toronto, I was honoured with a call from two such gentlemen who certainly had no reason to complain of the reception granted them. Then again Mr. McLean's book is full of covert sneers at a certain class of ministers of religion and their work, which other Protestant authors have eulogized beyond measure. To mention but the first volume of his work, see pp. 40, 144, 189, 215, 221. Perhaps some readers will object that these and other passages evidence rather bigotry than "little religiousness." Would Mr. Boyle have preferred the former word?

I repeat that I wish my honourable friend had chosen a different ground for this discussion, especially as he seems to have other grudges against me which he does not specify. Now I appeal to the judgment of every cool reader, when, quoting approvingly J. McLean, I said incidentally that he "seemed" to have been "little religious," did I warrant my present opponent to accuse me of having called him an "unreliable, irreligious and in every way bad man," a charge he now expressly lays at my doors? I am sure Mr. Boyle will see himself that his heart has had the better of his judgment, and that he has done me, unintentionally of course, an injustice. We are told that his friend is still alive. I do sincerely hope that he is not only alive, but still able to wield a pen. I will then easily show that, instead of "observing closely" and "not jumping at conclusions," as Mr. Boyle gallantly credits him with, he gives evidence in his book of unreliability in his descriptions and of hasty judgment in his estimate of the Indian make-up, both moral and mental.

The greatest *lapsus* I remember which can be put to the account of too big a heart is contained in the last page of my friend's criticism of my "History." He says that, having read it "with more



than usual care, the conclusion seems inevitable that the author has confused my old friend with some other and less worthy representative of the clan." He then refers to a letter which I quote (pp. 171, 175 of third edition). That letter mentions a McLean whose father was killed in Red River, on which I remark by way of comment that it "gives a clue to the innate dispositions of the future New Caledonian. His father died a violent death; he was himself to meet with a similar fate." Mr. Boyle then adds that J. McLean's daughters "will no doubt be surprised to learn how suddenly and shamefully their father passed away," and that if I do not confound two McLeans of totally distinct character, my "references to them in my book are so collocated as to lead readers to confound them." Wonderful, indeed, to say the least. Let us see the *corpus delicti* in the shape of my own printed pages. I state that John McLean—Boyle's friend—arrived at Stuart Lake, the capital of New Caledonia, in the fall of 1833 (p. 165). Though he never gives year dates, it is certain that he stayed but a short time in the district. In fact, he seems to have left it in the early spring of 1835. Now, that letter I quote concerning the McLean who met with a violent death, and which I say gives a clue to the innate dispositions of the future New Caledonian, is dated February 25th, 1837, and is recorded as such in my book! Therefore the McLean I then speak of must have gone to New Caledonia *after* Feb. 1837—on the other hand, I could not supply initials to the name, since I was quoting. How, I ask, can one, even without "more than usual care" take him for John McLean, whose arrival and stay in the country I had chronicled in a *previous* chapter? All disinterested readers, of course, recognize in that "future New Caledonian" the notorious character, Donald McLean, whose evil deeds and untimely end I duly record in the following chapters.

## THE SWORD AND BELT OF ORION.†

[Told me by George Wright. Also told me by others of the tribe of Wyandots. The form here used is the first draft made by me after hearing the stories. It is, however, nearly that used by Wright. He was a fine thinker, and a poet by instinct, though entirely uncultured. He could read English, and could write, but his reading was very limited. He secured his stories from the old Wyandots in Canada and Ohio. He believed them implicitly, and, while he had in some degree accepted Christianity, he firmly expected to go through the great cave in the North to the Land of the Little People.]

### THE SWORD AND BELT OF ORION.

WILLIAM S. CONNELLEY.

And so it seems that Dehn-dek of the Snake Clan married Oh-tseh-eh-stah of the Clan of the Big Turtle. The village in which they lived was on the lake-side. The blue hills were behind it, and

†This beautiful Wyandot myth was sent to me by Mr. Connelley as illustrative of the belief that "The great cave, or yooch-wah-tak-yoh in which the Woman who fell from Heaven is supposed to dwell, is in the North," and that "every Wyandot had to go there after death, because it was the entrance to the underground way which led to the Land of the Little People."—D. B.

clear streams dashed down their sides under the green pines and tumbled into the flashing lake. Here the otter swam and the beaver built his house. Into their lodge in this village came a daughter who became very wise before her eighth year,—wiser than all the Oo'-kehs of that time. The beasts loved her. The snakes came when she called them. The fish rolled in the shining waves at the sound of her voice. The trees bowed their heads and talked to her with their leaves. The streams smiled when she looked into their dark depths, and the small streams sang to her as he played about their banks. Her name was Mah-oh-rah,—she who sees another (when she looks into the water).

A deep sickness fell upon Mah-oh-rah. The medicine of the Hoo'h'-keh cured her not, and that of the Oo'-keh from afar had no healing for Mah-oh-rah. They sang in the lodge, and said to Dehn-dek and Oh-tseh-eh-stah :

'She arises from the ground!  
In a far land Mah-oh-räh walks before us!  
She comes to the great city and stands before its gates!  
Our Grandmother looks upon her! She who fell down from Heaven with  
Heh-noh lies upon her couch and beholds Mah-oh-räh!

She goes to the Land of the Little People; she goes through the old city  
in which our fathers were saved.  
Get thee down in haste and bring her again to her own people.'

Dehn-dek was a mighty warrior. Enemies fled from the battle when he followed the war path. Skilled was he with the bow and strong with the war-club. And he could run more swiftly than the deer of the forest. The way was long from his village to the city—to the great yoo'h-wäh-täh-yoh in which dwells our grandmother. But Dehn-dek thought only of his daughter and the words of the Hoo'h'-kehs in his village. He came to the hills which stand above the city, and a man stood in the way to guide him beneath the huge stones which move to and fro and crash together with a mighty shock to crush the pilgrim entering the forbidden city. When the roof above him was descending to fasten him down forever, he saw the woman who fell down from heaven lying upon her couch by the gate, through which he had passed. Bearskins covered it, and smoke arose about it from the fire on the floor. And there blazed the torches given by Heh-noh, or grandfather; their flames leaped and curled along the rocky vault. Thick clouds rolled down the depths of the city, and dark waters roared and surged beneath the rocky floor. Red glowed the lights on the dark clouds and black vapors. Standing by her side were the three deer who bore Tseh-seh-howh-hoohngk over the whole earth when he went forth to make the world live again. They arched their necks, they tossed their proud heads, they shook their strong horns. They smote the stony floor with impatient feet. Behind them was the sledge which carried our father, lashed to their necks with many a thong.

When he drew near, Dehn-dek said to our grandmother :

'Give again into my arms the daughter gone now to the Land of the Little People!

She stood here in this hour, but is gone on the lonely way to that land.  
Your children mourn for her; they cut themselves for grief!  
Let her return with me to our own land.





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ETHNOLOGY OF CANADA AND NEWFOUNDLAND.

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In the following papers we have brief, general accounts of Canadian aboriginal people—something never before attempted in anything like a methodical and scientific way by writers who have made special studies of our Indians. For the suggestion of this idea, as well as for the carrying of it out, too much credit cannot be given Dr. Franz Boas, professor of ethnology in Columbia University, New York.

It is really remarkable to find so many otherwise quite intelligent people who regard all Indians just as Indians and nothing more. It is sometimes even supposed that there is an Indian language, so that when a Mississauga meets an Iroquois, or a Blackfoot a Micmac, conversation should be easy; and any differences that exist are thought to be simply those arising from degrees of savagery, or of civilization, or because of climate and environment.

Ethnologically it is fortunate for us that our so-called "red" brothers have afforded so many opportunities to study primitive conditions of life, in various circumstances, and under different skies, for in many respects the American Indian stands head and shoulders above most other aboriginal peoples, except perhaps the Maoris, and some South Sea Islanders.

It is quite true that among all primitive races there are similarities, and, not seldom, very strong ones, as there are among those who regard themselves highly civilized, but these coincidences exist because of our common humanity. We are all subject to like desires, wishes, hopes, and fears. Food is necessary, and we must provide it in one or more of numerous ways; yet, we are not all the product of one mould physically or mentally, and in the latter respect we differ much more from one another than in the former, individually, tribally, and nationally. To account for the cause of these divergencies is not always an easy task, even when the peoples concerned are geographically far apart; it is sometimes difficult to do so when they are neighbors; and in numerous instances, no reason is forthcoming.

Perhaps we shall never be able to explain all that is now so problematical, or to understand much of what remains in doubt, but year by year we seem to overcome what hitherto have seemed insuperable obstacles. The following essays are from the pens of living writers, and cannot fail to prove of great service to readers who desire to understand the relationship that exists among British American Indians from Vancouver to Newfoundland. It will be observed that the statements of the writers are sometimes at variance in matters of detail—this is inevitable when any subject is treated independently by various hands, but as a whole, readers have reason to congratulate themselves on the present opportunity to learn at first hand what are the opinions of so many acknowledged authorities on such an extremely interesting subject.

D. B.

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I. HISTORICAL ACCOUNT.

BY CYRUS THOMAS.

At the time of the first post-Columbian contact of the Indians of Canada with Europeans, the country now embraced under this name was occupied by natives of several different linguistic stocks. These

groups were—following Major J. W. Powell's classification and nomenclature—the Algonquian, Iroquoian, Esquimauan, Athapascan, Beothukan and Chimmesyan families, the Siouan in part, the Kitunahan, Skittegatan, and the Salishan and Wakashan in part.

However, the dawn of Indian history in the Dominion of Canada dates back of Cartier's entrance into the St. Lawrence (1534) and even back of the appearance of Cabot on the coast of Labrador (1497). For the date of the first contact of the natives of Canada with people of the white race we must go back in the past to the appearance of the adventurous Northmen on the northeastern coast, which has perhaps a more important bearing in the study of prehistoric North America than is generally conceded. The recent re-examination by Storm, Reeves, Fischer, and others of the data relating to the discovery by the Northmen, has resulted not only in limiting the range of these adventurers along the coast of the New World, but also in determining more satisfactorily the localities visited. For example, it is now generally conceded that Helluland is Labrador; Markland, the Island of Newfoundland; and Vinland, or Wineland, the eastern part of Nova Scotia. The opinion formerly held that the natives encountered by Thorfinn Karlsefne in Vinland were Eskimo (Skrælings) is now considered erroneous; the two or three words uttered by them and the few characteristics noticed are not considered Esquimauan, but more likely Micmac or Beothukan—probably the former. If this conclusion be accepted, as now seems probable, then, to those who hold the theory that man's first appearance in North America was on the northwest coast in the post-Glacial era, this, and the additional fact that the Eskimo were most certainly met by the Northmen in Greenland, are positive proofs that these tribes or their ancestors had traversed the continent by the tenth century. Already the Eskimo had become an arctic people, had already skirted the northern coasts, and already adopted the customs suited to their habitats and mode of life. Already the great Algonquian stock had reached the Atlantic coast in its progress eastward. These facts must, therefore, form a basis of comparison and of time estimates in studying the traditions and early movements of the northern tribes.

The Eskimo, or Inuit, as they call themselves, have in the past occupied, and do yet in part occupy, a fringe of land along the Atlantic coast north of the Gulf of St. Lawrence; around the east and west sides of Hudson Bay; the Arctic coast and neighboring islands westward to Bering Strait, and down the northwest coast to the Alaskan Peninsula. They have seldom penetrated far into the interior, being essentially a littoral people, relying upon the products of the sea for food, clothing, and implements. From Alaska along the whole immense stretch of several thousand miles to, and including, Greenland, they all speak the same language, with but minor dialectic variations, and have the same general customs. They have always been a comparatively gentle and peaceable people, as is apparent not only from the reports of Arctic explorers, but also from the fact that they have always rendered assistance to these explorers when needed, and have never been known to attack isolated parties of whites who were not aggressors, however enfeebled by hunger, though these helpless visitors may have possessed many objects tempting to them.

We agree with S. E. Dawson (Can. and N. Fr. Stanford's *Compend. N. Am.* I. 67, 1897), in the belief that the general tenor of the

more reliable origin myths and traditions of the Indians of the Atlantic section of North America point to the northwest as the direction whence they came; the few traditions indicating movements from the east being comparatively modern and unreliable as indications of pristine habitats. Hence it has been in the past largely from the region north of the international boundary, as traditions testify, that the territory of the United States, especially east of the plains, has been peopled with a native population. It is our opinion that the Lenni Lenape started from the cold region north of the lakes on their migration to the south of the chain of great lakes and eastward to the coast; from whom offshoots were to branch out into New England and southward along the Atlantic coast to Pamlico Sound; that from the same region came the Iroquois, who sent offshoots to Virginia and the mountains of Tennessee and North Carolina. It was from the region north of Lake Superior the Chippewas of Wisconsin and Michigan came; and from the same region came the Miamis and Potawatomies; also the Winnebagoes and their southern offshoots. It was from British Columbia that the Athapascan offshoots made their way into Arizona and New Mexico, and it may be that from there also the Shoshoni group drifted southward. It is to Canada, since the white man gained control, that many of the remnants of tribes from New England and other parts of the United States have made their way in search of a final resting place.

Turning now to a brief consideration of the groups separately, we begin with those at the eastern extremity and move westward, somewhat along the lines of progress by the whites, to the tribes of the interior.

A small group consisting of a single tribe known as the Beothuks resided at the time of the Columbian discovery on the island of Newfoundland. These, probably first seen in post-Columbian times by Cabot, in 1497, and subsequently visited by Cartier in 1534, constituted, according to Major Powell's classification (Seventh Ann. Rep., Bur. Amer. Eth., 57) a distinct linguistic stock. It is probable that at the time of Cabot's discovery they occupied or had control of the whole island, but a century and a quarter later they had abandoned the southern portions, this change having been made on account of the frequent attacks upon them by the Micmacs and European settlers. They retired to the northern and eastern sections of the island; but their retreat was of no avail; pursued by the Micmacs, who took possession of the section they had abandoned, and warred upon by the European invaders, they rapidly wasted away, and by 1827 became extinct as a tribe. Possibly a few fled to Labrador to join the Nascapees.

The stock most widely distributed in the Dominion of Canada is the Algonquian, which extends (or did, before being gathered on reservations) from the Atlantic Ocean to the Rocky Mountains. In the eastern provinces were the Micmacs, Malecites, and Abnaki; in Labrador and eastern Quebec, the Nascapees, Mistassins, and Montagnais; in western Quebec and Ontario, the Mississaugas, Nipissings, and Ottawas, and the Chippewas in part; in Manitoba and the regions thence westward, the Chippewas in part, the Crees, and the Blackfeet group—though the Blackfeet have in recent years mostly drifted south of the international boundary. This widely extended stock, which was as widely-spread south of the boundary, was interrupted



about Lakes Erie and Ontario by the tribes of the Iroquoian stock, whose habitats were on both sides of these lakes.

At the time the first attempts were made to plant settlements along the Atlantic coast south of the Gulf of St. Lawrence, the Micmacs, called by the early explorers the Souriquois, were then inhabiting Nova Scotia and a part of the gulf coast of New Brunswick, also the neighboring islands. Their first contact with Europeans was probably at a very early date, as the Basque fishermen were in that region before Cartier's visit in 1534. However, continued intercourse with the whites did not begin until 1604, when Sieur de Monts attempted to plant a colony at Port Royal.

The French immigrants were kindly received by the natives, and allowed to settle on their lands without objection, and friendly relations were established between the two peoples which, notwithstanding the misfortunes of the colony, were maintained throughout, with a few slight interruptions. This friendship was largely due to the numerous marriages of Frenchmen with Micmac women. The history of these Indians for the next eighty years consists chiefly of wars with other tribes and the assistance they rendered the French in their contests with the English. The extinction of the Beothuks was largely due to the attacks of the Micmacs. The latter were, however, brought under the influence of the Catholic missionaries at an early day. The tribe seems to have been one tenacious of life, for, notwithstanding the vicissitudes through which they were forced to pass because of their exposed position, it appears from the later reports of the Canadian Department of Indian Affairs that they still number over three thousand persons—a thousand more than Biard's estimate in 1611. They are located in the Provinces of New Brunswick, Nova Scotia, and Prince Edward Island; nine-tenths of them being Roman Catholics. It is said that these Indians and some allied tribes had in use at the time they were first visited by Europeans a system of symbolic writing by means of which they were enabled to communicate with one another.

Other tribes of the Maritime Provinces are the Malecites, or Etchimens of early writers, and the Passamaquoddies, the two forming a sub-group of the Abnaki; to which sub-group the name Etchimin has been more correctly applied. These tribes formed an early attachment for the French, chiefly through the influence of their missionaries, and, with the other Abnaki, carried on an almost constant war with the English colonists until the fall of the French power in America. Although the other Abnaki tribes, as the whites encroached upon them, gradually withdrew to Canada, the Penobscots, Passamaquoddies, and Malecites remained in their ancient homes. The Abnaki, numbering some 400, are now at St. Francis and Beçancour in Quebec; the Malecites, numbering 800, in several villages in New Brunswick and Quebec; while the remnants of the Penobscot and Passamaquoddy tribes have homes in Maine.

The vast extent of territory embraced in the Labrador Peninsula has been thinly peopled in the past by semi-nomadic bands of Montagnais, Nascapes, Mistassins, and Swamp Crees, in addition to the Eskimo along the coast. The Montagnais group with whom the French came in contact at an early day, having joined Champlain in his first expedition against the Iroquois, was a confederacy of cognate tribes rather than a single integral body. These were the

Bersiamites, Tadousacs, Papinachois, Chisedecs, Ecoumains, and Nekoubanistes, though they were usually designated by the collective term Montagnais, or Lower Algonkins. Their linguistic relation appears to be closer with the Crees than with any other branch of the Algonquian family. The Nascapes appear also to be closely related to them.

The Montagnais are doubtless the Agouionda of Cartier, a name which he says the Indians of Hochelaga applied to those of Saguenay. They are spoken of in the first Jesuit Relation (Biard, 1611-1616) as friends of the French. Missionary labors among them were begun in 1615, and continued, with occasional interruptions, until 1776. They were at war at an early date, and probably in prehistoric times, with the Micmacs, and to some extent with the Eskimo; but their chief and inveterate foes were the Iroquois, who drove them for a time from the banks of the St. Lawrence, pursuing them to their strongholds about the upper Saguenay, compelling them to seek safety at more interior points. Sagard describes them as the lowest type of Indians in Canada, and Parkman says that they were the lowest and most degraded people of the Algonquian stock. They were to a large extent nomadic, unwilling, even under missionary influences, to settle down and cultivate the soil for subsistence. In 1812 they were estimated roundly at 1,500; in 1837, at 1,100; in 1884, the number officially reported was 1,395; in 1897, the Montagnais and Nascapes together numbered 1,741. At the last mentioned date they were gathered chiefly on the reserve at Lake St. John, Chicoutimi County, Quebec Province, the number at this point being 404. Although on a reserve and having a school with a competent teacher, they have made but little progress toward farming, still depending largely on hunting and fishing for subsistence, with such income as they receive as guides and for bark canoes, snow-shoes, moccasins, etc.

The Nascapes, the most northeastern Algonquian tribe, ranged over the interior of Labrador north of the Montagnais to Ungava Bay, and from Lake Mistassini to the Atlantic coast. Their usual habitat has been the interior tableland of the peninsula, it being only in recent years that they have visited the banks of the St. Lawrence. They have been, until very recently, semi-nomadic, their habits and customs being similar to those of the Montagnais. It is the general belief of the Nascapes that they were driven to their northern habitat by the Iroquois, who formerly waged war upon them. They have a definite tradition that their original home was west of Hudson Bay, and that when they reached northern Labrador they found the region uninhabited save by some Eskimo, chiefly along Hudson's Strait. It is possible that the Indians seen by Gaspar Cortereal in 1499, seven of whom he carried to Portugal, were of this tribe, as the description given will not apply to the Eskimo. There was but little intercourse between them and the French.

Although the Iroquois played such an important role in the history of Canada, holding for a time the balance of power between the French and English, and certainly had their pristine home north of the lakes,\* and have in part found their final resting place in Canada—yet, in the limited sense of the term *Iroquois*, the six (originally five) confederated tribes do not belong in historic times to Can-

\* See page — and following.



ada, but to the United States. The long and cruel war carried on by them against the French of Canada and their Indian allies has been so often written up and is so well known as not to require repetition here, did our space permit it.

It may be assumed as probable that, like other groups of the Atlantic section, they came originally from the northwest, as part, at least, of the Iroquoian family was located at an early day chiefly in the peninsula north of Lake Erie. If credence is to be given to the tradition that they, or a part of the group—possibly some of the Iroquois—moved at an early date up the St. Lawrence from near its mouth, this may be explained by the supposition that some division pressed on in advance of the group to the gulf coast in search of a bountiful food supply. It is probable that, while the group was located chiefly in the region immediately north of Lake Erie, which section became the Huron country, the Cherokees, and possibly the Eries also, broke away from the parent stem and moved south of the lakes into the region now embraced in Ohio.

It is true that the people of Hochelaga, visited by Cartier in 1534, were of the Iroquoian stock; but Mr. Hewitt concludes from his close study of the languages and history of the group that the evidence does not sustain the general opinion that a part of the Iroquois proper were living north of the St. Lawrence River at that time. The people of Hochelaga were most likely Hurons, or possibly one of the smaller cognate tribes. Seventy years later, when Champlain appeared on the scene, the Hochelaga and Stadicone of Cartier had disappeared, and Algonquian tribes were in possession of the St. Lawrence valley.

Although the Iroquois had battled so long and so persistently against the French while they retained the power in Canada, yet it was chiefly in this section that they sought a final retreat when conquered by the United States troops under Sullivan. Their number at present in the Dominion—chiefly at the Bay of Quinte, the Thames and Grand River, Ontario, and Caunawaga, St. Regis and Lake of the Two Mountains, Quebec—amounts to something like ten thousand persons (9,671 in 1897.).

The tribes of the Iroquoian family in this region, other than the Six Nations, were, at the time that Europeans appeared on the scene, as follows: The Hurons, occupying the section immediately north of Lake Erie and from Lake Huron eastward well toward Niagara river. Immediately east of them was the little tribe or sub-division named Tionontatis, known also as the Patun or Tobacco nation; east of these and occupying both banks of Niagara river the Neuter tribe, so named from their effort in their intermediate position to remain neutral in the war waged between the tribes on the opposite sides of them.

The saddest episode in the history of the Indians of Canada is that of the relentless warring upon the Hurons and, incidentally, the other two small tribes, and their final ruin, by the Iroquois. Not satisfied with massacring many of their people, and driving them from their homes, these relentless victors followed them into their retreats, forcing the scattered remnants to retire still further into the interior. During the strife the two smaller bodies—the Tionontatis and the Neuters—were entirely destroyed, becoming extinct at an early day.

Not only had the Huron towns been destroyed, and the nation scattered in fragments to the east, west and south, but the Indian



country all along the waterway from Montreal to Georgian Bay had been literally depopulated and turned into a wilderness. Moreover, we may add with Justin Winsor, "the Huron country never again knew the traces of this people, and only the modern archæologist, wandering between the latter-day villages of an alien race, finds in the forest the evidences of the former occupants" (Cartier to Frontenac).

The remnants of the Hurons, who are known, in part, as Wyandots or Wendats, are as follows: Hurons at Lorette, Province of Quebec, Canada, 456; Wyandots in Indian Territory, U.S., 365.

The area north of Lake Erie, from which the Hurons were driven by the Iroquois, was subsequently in part taken possession of by the Mississaugas. The people of the latter tribe, when they first became known to the French—about the middle of the seventeenth century—were located on Mississauga river north of Lake Huron, and in part on Manitoulin island. Not long subsequent to this date they moved east and south, taking possession of the region abandoned by the Hurons, and soon spread over the peninsula of southern Ontario from Lake St. Clair to the outlet of Lake Ontario. They also made raids to some extent on the Iroquois in New York. About the close of the revolution they had one village on the south side of Lake Erie, near Conneaut, Ashtabula county, Ohio. The land on which the Iroquois are now settled at Grand River, Ontario, was bought from the Mississaugas. In 1746 they were received by the Iroquois into their league as the seventh tribe, though not, as it seems, with the full privileges and rights of the other six tribes. However, this alliance lasted only until the French and Indian war, a few years later. The Mississaugas are closely related to, and seem to have been originally a part of, the Chippewas. In 1897 the population officially reported was 1,109, residing at Mud Lake, Rice Lake, Scugog, Alnwick, and New Credit, Ontario.

The Nipissings, though forming a comparatively small and unimportant tribe, are brought into early notice from the position which they occupied on the lake of the same name at the head of Ottawa river, the early travel-route to the upper lakes. Champlain met with them in 1615; Jean Nicolet was next among them for some time previous to 1632; and in 1637 they were visited by the missionaries, Garnier and Chastelain. In 1650 the Iroquois penetrated to their habitat, and, having massacred a large number of them, forced the others to seek safety in a more northern region. They chose as their retreat the shores of Lake Nepigon, where they remained until 1667, when they returned to their former home about Lake Nipissing. Their reputation as practicers of magic gave them the name of sorcerers which is frequently referred to by early writers. They have no history separate from other related Algonquin tribes of the same northern region. The chief remnants of the tribe are living on the reservation at Lake Nipissing. These, numbering about two hundred, are all Roman Catholics, and have an excellent church. They also have a school, usually taught by a female teacher.

The region about the northern end of Lake Huron seems to have been an important locality to the natives in the prehistoric era, a meeting point of the tribes. It was the chief crossing place from the north to the south side of the lakes in the early migrations. It was here that more than one of the original groups separated into tri-

bal divisions which started hence on their individual life history. It was here, also, that a number of these divisions which had not wandered away to other sections still lingered at the coming of the whites. It was in this region, as we have seen, that the Mississauga first became known to the whites.

Another minor Algonquin tribe of this section was that known as the Amikwa, or "Beaver Nation," found by the French on the north shore of Lake Huron opposite Manitoulin island. Bacqueville de la Potherie says that they and the Nipissings once inhabited the shores of Lake Nipissing, and that they made themselves masters of all the other tribes of that section until reduced by disease, and the Iroquois compelled the remainder of the tribe to retreat, some to the French settlements, others to Lake Superior and Green Bay, Wisconsin. In 1740 they settled on Manitoulin Island.

According to the traditions of the Ottawa, Chippewa, and Potawotomi tribes, the three groups are descended from the same stem and were formerly united as one people at some point north of the lakes, apparently north of Lake Superior; whence the Ottawa and Potawotomi tribes, and the Chippewa in part, migrated southward. They separated in the region of Mackinaw, the Potawotomis and southern Chippewas going west into the section now embraced in Wisconsin, while the Ottawas turned to the southeast. The earliest mention of the latter places them on Manitoulin Island, Lake Huron, and along the northeast coast of this lake. They were among the first of the western tribes to navigate Ottawa river on trading expeditions to the French settlements, and it is probable the river received its name from them. They were allies and firm friends of the French and the Hurons.

The Iroquois, having destroyed the Hurons in 1646, and still thirsting for blood, turned their arms against the Ottawas, who fled, with a remnant of the Hurons, first to the islands at the entrance of Green Bay, Wisconsin, where they were kindly received by the Potawotomis. A few years later they moved westward, a portion going to Keweenaw Bay, where they were found by Father Menard in 1660. Another portion fled, with a band of Hurons, to the Mississippi, and settled on an island, at the entrance of Lake Pepin. Driven thence by the Sioux, whom they had foolishly attacked, they moved to Chequamegon Bay. Harassed here by the Sioux and being assured of protection by the French, they returned in 1670-71 to Manitoulin island, a former home. Their stay here was short, as by 1680 most of them had joined the Hurons at Mackinaw about the station established by Marquette in 1671. The two tribes lived together until about 1700, when the Hurons removed to the vicinity of Detroit. About the same time a portion of the Ottawas seem to have settled on the east coast of Michigan between Saginaw Bay and Detroit. The band which had moved to Southeastern Michigan returned to Mackinaw in 1706. Soon after this the chief seat of the tribe was established at L'Arbre Croche, Michigan. From this point they spread southward to various places in this state.

The Ottawas were strong adherents to the English interests, as against the United States; and a small part of the tribe which refused to submit to United States' authority removed to Canada and settled on Walpole island in Lake St. Clair. The other Ottawas in Canada are on Manitoulin and Cockburn islands, and the adjacent shores of

Lake Huron. As early as 1859 those in Canada had mostly become agriculturists, living in good comfortable log cabins; and most of those in Michigan have become citizens.

Originally the Ottawas were divided into four bands—the Keinoche, Kiskakon, Nassauaketon, and Sable, though it does not appear that there were any differences in the language spoken by these divisions. The total number of Ottawas at present is about 5,000, of whom one-fifth reside in Ontario, Canada.

Of the other two tribes, the Potawotomi and the Chippewa, of the confederated group mentioned above, we have only to refer here to the latter, as the Potawotomi, although originally on the Canadian side, have in historic times made their home chiefly south of the lakes. The Chippewas, or Ojibwas, at the time of their greatest numerical strength, formed the largest single tribe of Indians north of Mexico. Their former range was the region bordering Hudson and James bays on the north and Lakes Superior and Huron on the south, and also the southern shore of Lake Superior. The region immediately about Sault Ste. Marie seems also to have been a favorite resort and food-gathering point for them. The first knowledge of the tribe obtained by the French related to those residing at these falls, from which fact the name “Saulteurs” or “Falls Indians” was often applied to them, and also occasionally to the entire tribe. Their tradition seems to point to the shore of Hudson or James’ Bay as their pristine home.

It is possible that Nicollet met with them in 1634 (or 1639); however, the earliest recorded notice of them is that in the Jesuit Relation for 1640, where they are mentioned under the name Baouichtigouin, as then residing at the Sault. In 1642 they were visited by the missionaries Raymbout and Joques, who found them at the Sault engaged in a war with a people to the west, apparently the Sioux.

Although the Chippewas have, since they first became known to the whites, been strong in numbers, spreading over an extensive territory, they have not occupied a prominent place in the pioneer history of the country, owing to their remoteness from the frontier during the colonial wars. The southern division—those living south of Lake Superior—being more warlike in disposition than those of the northern group, have played a much more important role in the intertribal wars of the northwest than the latter. Step by step they drove the Sioux westward, until they forced them out upon the plains. By them the Foxes, diminished in numbers by the attacks made upon them, were forced to seek safety by uniting with the Sauks. While the Chippewas, who had received fire-arms in advance of the other tribes west of Lake Michigan, were thus pushing back the eastern Sioux, many of their people, chiefly the Mississauga, already mentioned, had made their way eastward into the peninsula between Lakes Huron and Erie.

The Chippewas dwelling north of Lake Superior were comparatively unknown to the whites until long after intercourse with those south had been established. The location of this northern group being off the usual lines of travel, they seldom came in contact with the whites. They were generally mild and harmless, little disposed to war upon their tribes. On account of this peaceful disposition the name “Rabbits” was bestowed upon them by their more warlike southern brethren. They consisted of two local divisions known as



"Men of the Thick Woods" and the "Swamp People"—names derived from the character of the country they inhabited. The Maramegs, a tribe closely related to the Chippewas, if not actually a division of them, was incorporated with the northern group previous to 1670. The northern Chippewas are so intimately connected with the Crees and Maskegons that the three can be distinguished only by those acquainted with their dialects and customs; while south of the lake the Chippewas, Ottawas, and Potawotomis have always formed a kind of loose confederacy, frequently designated "The Three Fires."

The Maskegons, it is said, sprang from the three Chippewas, the lynx, the reindeer, and the pike—which went northward from Sault Ste. Marie when the southern group started thence westward into the regions now embraced in Wisconsin, driven there possibly by some incoming tribe.

From the various estimates and enumerations of the population of the entire Chippewa tribe from 1764 to the present time, it would seem that there has been but little if any diminution in numbers. In 1764 the estimate was 25,000; in 1843, about 30,000; while the number at present is supposed to be between 30,000 and 32,000, of which 15,000 are in Canada and between 15,000 and 17,000 in the United States.

One of the most important of the tribes formerly inhabiting the region around the southern end and southwest of Hudson bay was that known as the Crees, but variously termed by early writers Cris-teneaux, Knisteneaux, Klistenos, etc. The territorial limits of the tribe does not seem to have been definitely given by early explorers who visited the section before the relations of tribes were disturbed by the incoming of the whites. However, it is known that the Crees hunted over the region extending from Moose river, which enters James' bay, northwest to Churchill river, and westward from the vicinity of Hudson Bay to the head of Beaver river, and thence south to the hunting grounds of the Dakotas.

When they first became known to the Jesuit missionaries a part of the tribe resided in the vicinity of James' Bay, as it is stated as early as 1640 that "they dwell on the rivers of the north sea where the Nipissings go to trade with them." However, the relations of 1661 and 1667 indicate a region more to the northwest as the home of the larger part of the tribe. According to tradition, a portion of the tribe lived for a time about Red river, associated with the Chippewas and Maskegons, but were attracted to the plains by the buffalo. Although the Crees were essentially a woods people, many bands were virtually nomadic, their movements being governed largely by the food supply.

Ethnically and linguistically the Crees are closely related to the Chippewas—Hayden, in fact, makes them an off-shoot of the latter, and the Maskegons another division of the same group. However, Brinton and, perhaps, most ethnologists would be inclined to consider the Crees as representing the original stem of the sub-family to which these tribes belong. The tribe is, in fact, a typical member of the Algonquian stock, and, as was suggested more than half a century ago, may be the most direct representative of the original form of that stock, and, until gathered on reservations, had remained nearest the pristine home of the family. However, Hayden (*Ethnography of the Indian Tribes of Missouri Valley*) says the Crees assert

that formerly they inhabited a district much farther north than at the date at which he was writing (1865), their range at that former period being along the borders of Slave and Athapasca lakes, and thence to the northern end of Lake Winnipeg.

After obtaining arms the Crees made frequent war raids into the very heart of the Athapascan country, even to the Rocky mountains, but the Missiwipi river was accounted the northern limit of their territory, and their cessions of land to Canada claimed nothing beyond this line.

According to Hayden the Crees were divided, in 1865, into nine regular bands, which he names, in addition to which there were several small, unnamed bands besides a number of the tribe around Cross lake. So far as now known, the true ethnic divisions are the Crees proper, the Maskegons or "Swampy Crees," and the Monsonis or "Moose Tribe." The division into "Woods Crees" and "Plains Crees" has no reference to ethnic relations. The total population at the present time is estimated at 15,000.

One of the tribes of the Dominion which presents points of considerable interest to ethnologists is that known as the Assiniboin (or "Stone Sioux"). The chief point of interest in this case is that the origin and history of the tribe can be traced from the initiatory stage to its full formation. This tribe, which belongs to the Dakota group of the Siouan stock, forming one of the two primary divisions of that group, is an offshoot thereof. According to tradition the tribe was originally a part of the Wazikute gens of the Yanktonai, one of the Dakota tribes—a tradition which is confirmed by linguistic evidence. The separation from the parent stem, judging by the slight dialectal difference in the language, could not have greatly preceded the appearance of the whites. Nevertheless it must have taken place before 1640, as the Assiniboin is mentioned by the Jesuit Relation of that year as a distinct tribe. The indications, so far as apparent, point to the Lake of the Woods as the region where this separation took place, and the date thereof as not long prior to 1640. The relation of 1658 places them in the vicinity of Lake Alimibeg (Nipigon, Jeffery's map of 1762) between Lake Superior and Hudson Bay. From here they moved northwest to the vicinity of Lake Winnipeg, where they were living in 1670, having joined the Crees, who received them with open arms, and admitted them to friendly association. After separation from the parent stem they were henceforth at war with their Dakota brethren, their lot being cast with the Crees. During this association, which continued without interruption until comparatively recent years, the Assiniboin rapidly increased in numbers. They appear to have gradually moved westward upon the plains, becoming to a large extent nomadic; their range during the latter half of the eighteenth and first half of the nineteenth century, and until gathered on reservations, extending along the Saskatchewan and Assiniboin rivers, in the Dominion of Canada, from the forest limit westward well up toward the spurs of the Rocky mountains.

A band of this tribe accompanied La Verendrye in his expedition of 1738 to the Mandan villages of the upper Missouri, by which the whites obtained their first knowledge of that region. As they lived beyond the white settlements and away from the principal lines of travel, their history so far as known relates chiefly to their conflicts

with surrounding tribes. Besides their contests with their inveterate enemies, the Dakotas, they were frequently at war with the Gros Ventres and the Arikaras, forcing the latter from their earthen villages on the eastern bank of the upper Missouri and compelling them to seek a home further west.

At one period in their history they had pushed their way to the south side of Missouri river, along the Yellowstone, but the continued attacks of the Crows, the Blackfeet, and the Dakotas forced them, after suffering heavy losses, to return to their northern range. Previous to the great smallpox epidemic of 1836, the Assiniboin population was estimated at from eight to ten thousand, but this fearful scourge swept away in a single season fully one-half their numbers. In 1902 there were in the United States 699 at the Fort Belknap reservation, Montana, and 535 at the Fort Peck Agency—a total of 1,234; in Canada there were at various points 1,371, making the total population 2,605.

Farther to the west, in the region where the international boundary line approaches the eastern skirts of the Rocky mountains, is found an Algonquian group which seems, as it were, a tribe born out of due season—the Siksika, or, as better known, the Blackfeet, including, in the broader use of the term, not only the Blackfeet proper, but also the minor tribes known as the Kino, or Blood Indians, and the Piegans. These Indians, whom we shall include here under the term Blackfeet, though now chiefly south of the boundary, are Canadian in origin. They are of special interest to the antiquary and ethnologist in the study of the prehistoric northwest. Their country in modern times, until they were placed on reservations, was northern Montana and the adjacent portions of British possessions, extending from the Rocky mountains on the west to the junction of Milk river with the Missouri on the east, and north and south from Musselshell river in Montana to Belly and South Saskatchewan rivers in British territory. However, their history and traditions indicate a more northern origin.

When they were first encountered by employes of the Hudson Bay Company, they were living along Saskatchewan river and its tributaries. After this, driven apparently by the attacks of the Crees, they began to move south and west, and not long thereafter came into possession of horses taken in war from the Crows and Shoshoni. By 1816, aided only by the Gros Ventres, they had conquered a large territory from the Assiniboins, Crows, Flatheads, Shoshoni and other tribes. Their hunting grounds then extended from the Saskatchewan to the Yellowstone. However, Dr. Hayden and G. B. Grinnell agree in locating the early home of the Blackfeet far north in British America; the latter bringing forward a considerable array of evidence that their original home was in the country north of the Lesser Slave Lake and next south of the Beaver Indians. This tradition is fortified by their terms for the cardinal points, by the names applied to them by the Crees, by the evidence that they formerly inhabited a timbered country, and by the recollection of their first arrival at the Rocky mountains from or through a timbered region. But more especially does their long and intimate association with the Sarcees, an Athapaskan tribe which certainly came from the north, indicate the region of their pristine home and the direction of their chief migratory movement.



All the evidence, therefore, leads to the conclusion that the Blackfeet were, within traditional times, the most northwestern representative of the Algonquian stock. Mackenzie tells of a people, whose name and further history he was unable to obtain, who were formerly wedged in between the Crees and the Athapascans, who were pressed back toward the mountains or else exterminated. It is now quite evident that these were the Blackfeet, who, when driven out, were accompanied by the Sarcees.

The questions which these facts bring forward, bearing on the prehistoric movements in the northwest, though belonging to the speculative field are nevertheless interesting. Were the Blackfeet, the last of the Algonquian procession developing and moving toward the southeast? Or were they, according to the opposite theory, the pioneer Algonquians in a movement to the northwest? Possibly the tribe was developed from an isolated or estranged element; nevertheless, speculation as to their origin brings before us the more important inquiry, was this northwestern section, the place of the development of the Algonquian stock?

In the more distant northwest, beyond Churchill river to Lake Athapasca, and thence to Great Bear lake, we meet with a number of tribes belonging to the Athapaskan stock—a group which touches in its northern extremity, the Eskimo fringe along the Arctic coast, and in its southern extension reaches into northern Mexico. From east to west they roam over nearly the entire breadth of land from the Pacific ocean to Hudson bay. But the Indians of this area constitute only one of the groups of this great family. It is represented by a number of small colonies scattered along or in the vicinity of the Pacific coast in Oregon and California; and by the various Navaho and Apache tribes of Colorado, New Mexico, Arizona, and northern Mexico, and the Lipans along the lower Rio Grande. The tribes of this stock are of more than ordinary interest to the ethnologist and philologist, because the geographical positions of the various offshoots show beyond question evidences of extensive prehistoric migrations; and also, notwithstanding the larger portion of the northern group is found east of the Rocky mountains, that the family belongs essentially to what we have termed the Pacific section, that is, the western ethnological section of North America, the Atlantic or eastern section comprising only that portion east of the Rocky mountains and north of the Rio Grande.

The Indians of the northern group, the only division of the family found in Canada and Alaska, have very commonly in recent years been designated by the term *Tinneh*, or *Déné*, a name which they apply to themselves.

The *Déné* had until recently very little intercourse with the whites, this being limited to their fur-trading relations with the Hudson Bay Company, and occasional contact with an explorer. It is known, from the first knowledge of them obtained by the whites, that they carried on a desultory warfare with the Crees and other tribes living south of them, and that those living on the lower Mackenzie river were almost constantly at war with the Eskimo.

## II. PHYSICAL TYPES OF THE INDIANS OF CANADA.

BY FRANZ BOAS.

Although anthropometric material from Canada is very incomplete, it is possible to describe a few of the prominent types inhabiting the country. Unfortunately, two large regions must be excepted from our consideration, because practically no material to speak of is available. These regions are the Mackenzie basin, extending from the Rocky Mountains to Hudson Bay, and the whole interior of Labrador. A determination of the physical types of the region between the St. Lawrence and Lake Superior is also difficult, because at the present time the natives are so much mixed with white blood that an accurate determination of the earlier types is almost impossible. Therefore all we can do at the present time is to describe from the material heretofore collected the distribution of types found along the Arctic coast, the Pacific coast, and along the western part of southern Canada. In this area four distinct types may be distinguished: first, the Eskimo type, which is found in its most marked form along the shores of Hudson Bay and in the Arctic archipelago; second, the north Pacific coast type, which occupies the coast extending from the Aleutian Islands, southward along the coast of British Columbia, showing, however, in this district considerable variations; third, the western plateau type, which is found in the interior of British Columbia; fourth, the Mississippi Basin type, which occupies the whole of the southern prairies of Canada. While the Eskimo type, the plateau type and the Mississippi Valley type are each quite uniform in the territory in which they occur, the Pacific coast type shows a remarkable degree of variability in different parts of the coast.

Before describing the types of these various regions, it may be well to make a few remarks regarding the position of the Canadian Indians in relation to the American race, and to the Asiatic race. Taking the anatomical traits of the tribes of northwestern Canada as a whole, we are impressed by their resemblance to Siberian tribes. The color of the skin, the texture and color of the hair, the form of the head, and the conformation of the face of the inhabitants of these areas show undeniable similarities. At the same time, the Asiatic types differ from their nearest American neighbors in the more pronounced Mongoloid development of the eye and in smaller measures of the face. In recent times opportunity is frequently given to see American Indians, Japanese, and Chinese, in the same costumes, on board of vessels plying on the Pacific coast, and notwithstanding their far-reaching similarity, it is on the whole, not difficult to recognize the Asiatic by the two traits just mentioned, although a considerable number of cases occur in which it is not quite easy to judge whether the subject is an Asiatic or an Indian.

On the other hand, if we compare the northwestern Canadian Indian with types like that of the Indians of southern California, or with that of the Indians of the central parts of the United States, the differences of type are striking. The color, formation of the head, conformation of the face, and shape of the nose are so fundamentally different in these regions that the similarity between the northwestern



Canadian and the Asiatic types seem to be greater than that between this type and that of the California Indian or of the Indian of the middle Mississippi.

It appears, therefore, that we must consider the inhabitants of northeastern Asia and of America as a unit divided into a great many distinct types, but belonging to one and the same of the large divisions of mankind.

After these introductory remarks, we will briefly describe the various types enumerated above.

The Eskimo type, as stated before, is found in its most pronounced characteristics in the Hudson Bay region. Their stature is short, the men averaging, approximately, 158 centimeters, the women 148 centimeters. Their heads are characterized by large size and great capacity of the cranium. The cephalic index is very low, averaging approximately 72; the skulls, at the same time, are very high, the index averaging nearly 77. At the same time the head is absolutely very long and very high, the average length of the head being about 195 mm., the width 144 mm., the height 150 mm. One peculiar trait of the Eskimo skull is the great width of the face as compared with the width of the skull. Eighty-five skulls from Smith sound, measured by Bessels, give an average breadth of head of 130 millimeters, while the width of the face is 133 millimeters. Similar conditions prevail among all the pure eastern Eskimo. Combined with the great width of the face, is a pronounced prominence of the cheek-bones, which gives to the whole face a remarkable flatness and width, extending from the malar points across the nose. In contrast with this great width is the narrowness of the nose, which almost seems incongruous. While, in most races we are accustomed to combine with a wide face a wide nose, the Eskimo has a very narrow nasal aperture, and, comparatively speaking, high nasal bones, which give to the men, at least, a high-bridged nose. The color of the skin is, on the whole, light but when exposed to the sun, it assumes a dark reddish tinge. The hands and feet are remarkably small.

West of the Mackenzie, these traits are not so marked. The average stature in this region is much higher, the men averaging about 168 centimeters, the women about 156 centimeters. The length of the head is still considerable, reaching in the men, approximately, 190 millimeters, while the width of the head is about 154 millimeters, the cephalic index being approximately 80, but the trait that the width of the face is greater than the width of the head still persists, the width of the face in this region being approximately, 156 millimeters. Although nasal measurements are few in number, it seems that the peculiar narrow nose is characteristic of these tribes also.

It was stated before that very little is known of the type of people of the Mackenzie basin. The few skulls and measurements that are available suggest a fairly close relation between this type and that of the northern part of the coast of British Columbia. The inhabitants of the region west of the Mackenzie seem to have a stature of about 166 centimeters and their heads are moderately long, averaging about 195 millimeters, and the width of the head averaging about 153 mm. The face is wide, having about the same width as the face of the Indians of the Mississippi basin and of those of the northern parts of the Pacific coast, averaging 148 millimeters. The cephalic index is about 79. It would seem that the cheek bones are



not as prominent as those of the Eskimo. The nose seems to be much smaller than that of the Indians of the Mississippi basin.

The physical characteristics of the Indians of British Columbia are by no means homogeneous. As compared to the Indians east of the Rocky mountains and further south, they have in common a lighter complexion and lighter hair, but the shapes of their heads and faces differ considerably. Two sub-types may easily be distinguished—the northern type, represented by the Haida, the Indians of Nass River, and the Tsimshian; and the Kwakiutl type. In the Province of British Columbia is also found the type of the western plateaus.

These types may be characterized by the following measurements:—

#### I. MEN.

	Northern Type.		Kwakiutl Type.		Type of the Western Plateaus.	
	Average.	Mean Error.	Average.	Mean Error.	Average.	Mean Error.
	mm.		mm.		mm.	
Stature . . . . .	1675	±7.40	1645	±5.90	1634	±7.90
Length of head	194.6	±0.80	188.7	±1.19	186.5	±0.55
Breadth of head	160.6	±0.67	159.0	±1.00	155.9	±0.52
Breadth of face	153.7	±0.85	151.4	±0.54	147.4	±0.41
Height of face.	121.6	±0.87	128.0	±0.67	120.3	±0.71

#### II. WOMEN.

Stature . . . . .	1542	±5.70	1537	±5.90	1540	±5.00
Length of head	185.6	±0.88	186.9	±1.64	179.5	±0.53
Breadth of head	153.2	±0.90	154.3	±1.44	150.0	±0.41
Breadth of face	143.9	±0.80	144.3	±0.64	138.8	±0.40
Height of face	114.3	±0.93	119.3	±0.82	112.5	±0.54

They may be described as follows: All these types are of medium stature, and their arms are relatively long, their bodies short. Among the northern type we find a very large head. The transversal diameter is very great. The same may be said of the face, which has an enormous breadth. The height of the face is moderate, and therefore its form appears decidedly low. The nose is often concave or straight, seldom convex. The noses of the women are decidedly concave. The elevation of the nose over the face is slight. The point of the nose is short.

The dimensions of the head of the Kwakiutl are similar to those of the northern types, but the head seems to be slightly smaller. The face shows a remarkably different type, which distinguishes it fundamentally from the faces of the other groups. The breadth of face is nearly the same as that of the northern type, but its height is enormous. The same may be said of the nose, which is very high and comparatively narrow. The point of the nose is short: its eleva-

tion is also very great. The nasal bones are strongly developed, and form a steep arch, their lower ends rising high above the face. For this reason convex noses are found very frequently among this type. Convex noses also prevail among the women, and for this reason the difference between the female form of the Kwakiutl and the female form of the northern type is very great.

The western plateau type is characterized by a very small head, both diameters being much shorter than those found on the coast, while the proportions are nearly the same. The transversal diameter of the face is much shorter than that of the coast Indians, being nearly the same as that found among the Indians of the plains. The face is much lower than that of the Kwakiutl type, and also slightly lower than that of the northern type. The nose is convex and heavy. Its point is much longer and heavier than the point of the nose among the coast types.

There are good indications of the existence of a distinct type on the most southern part of the coast, but the evidence is not quite satisfactory. The Lillooet of the Harrison lake region are remarkable on account of their very short stature, which averages less than 160 centimeters, and for the great breadth of head, which is indicated by a cephalic index of nearly 89. The northern branch of the Lillooet are slightly taller, averaging 162 centimeters in stature, and the heads are not quite so broad, having an index of about 87. The coast Salish of the Fraser River delta, southern Vancouver Island, and of the Puget Sound region seem to be closely allied to this type. The head form is not quite certain, since it can be determined only among young children who have not been subjected to the custom of deformation, which prevailed until recent times all along the coast. They all seem to be characterized by great shortness of the head, the index ranging between 84 and 87. The average stature is, approximately, 164 centimeters; the face is characterized by great breadth, flat, often concave, nose, thick lips and receding chin. It is worth remarking that further to the south a sudden change of type takes place on the Columbia River, where narrow and high ridged noses are found, and taller statures. In some respects the Columbia River type resembles the type of the Kwakiutl.

The Kootenay are in type similar to the Indians of the plains. They are much taller than the Indians of British Columbia, averaging 169 centimeters; their heads are more elongated, the average index being about 80. At the same time, their color is darker, the face slightly heavier than that of the Indians of the interior of British Columbia and the nose is more like that of the plains Indian than that of the more western tribes. In general, it would seem that the type of the southern interior of British Columbia is more closely affiliated to this type than to those of the coast.

Very little is known of the physical characteristics of the Tlingit of the coasts of Alaska, but the few measurements and descriptions that have been obtained, suggest that they resemble the tribes of northern British Columbia.

It is also remarkable that the Aleutians differ entirely from the Eskimo of the neighboring mainland. The skulls that have been described are short, and, so far as we can judge, entirely different from the skulls of the Alaskan Eskimo, and also from those of the native tribes of northeastern Asia.

In southern Canada, east of the Rocky Mountains we find the type which is characteristic of the Mississippi basin. The cephalic index ranges a little below 80, while the stature ranges from 168 to 172 centimeters, the more southern tribes being, on the whole, the taller ones. The cephalic index, in the region of the great lakes, is a little higher than that found further to the west. The average is about 80 among the western Ojibwa, and about 82 among the eastern Ojibwa. The distribution of the index suggests that among the eastern Ojibwa a very short-headed type may survive. Further to the east, we find the Iroquois, whose heads are more elongated, having an index of approximately 79. The same index is found among the present inhabitants of the Atlantic Provinces. The stature of the Iroquois and Indians of the Atlantic Provinces at present is approximately 172 centimeters. It must, however, be borne in mind that the bulk of the present population are mixed bloods.

It is important to note that skulls collected from ancient cemeteries of the region inhabited by the Hurons, and extending from there to the mounds of Dakota are very long. An average of 35 supposed Huron skulls gives an index of not quite 75, and the same value is obtained from 19 skulls from Dakota mounds. One hundred and one skulls from Illinois mounds gave an average index of 77. We have therefore the peculiar condition that at the present time a somewhat short-headed population is found in this area, which was preceded by a population characterized by very long heads. Detailed descriptions of the cranial conditions are not available, so that no thorough comparison of the types in question can be made.

Turning farther to the east, it is worth mentioning that 75 skulls from Indian burial places in New England, all of which probably precede the period of white contact, give an average index of 75. It seems instructive to compare the absolute skull measurements of these areas.

	Length of skull.	Width of skull.	Height of skull.
Eastern Eskimo .....	185	132	138
New England .....	181	136	136
Sioux .....	180	142	131

It appears that the New England type, so far as expressed by skull diameters, is intermediate between the type of the Eskimo and that of the Mississippi Valley Indians. Whether this may be assumed as proof of an admixture of Eskimo blood is a point that I do not venture to decide at the present time. It would be interesting to know the relation of this type to the long-headed Huron type.

### III. THE INDIAN LANGUAGES OF CANADA.

By FRANZ BOAS.\*

One of the most peculiar ethnographic phenomena of the American continent is the great diversity of native languages. The number of distinct linguistic families in North and South America is very large, probably exceeding one hundred. On the whole, the number of

\*The section on Kootenay has been contributed by Dr. A. F. Chamberlain.



families on the Pacific coast is much larger than that on the Atlantic coast, the majority being found in the region of the Rocky Mountain system and of the Andes, including their eastern foothills. In North America, particularly, large areas are inhabited by tribes speaking cognate languages, on the plains and on the Atlantic coast, while on the Pacific slope, a surprising diversity of language is found. Similar diversity prevails on the coast of the Gulf of Mexico.

It has frequently been claimed that all the American languages have certain traits in common. They have been called incorporating and polysynthetic languages; incorporating, in so far as there is a strong tendency to embody the object of the sentence in the verbal forms; polysynthetic, in so far as a great number of material ideas are combined into a single word by means of grammatical processes.

Closer studies of the American languages which have been carried on during the last twenty-five years show very clearly that such a generalized view of the type of American languages is not admissible, and that a great variety of forms occurs.

The characteristics of distribution and the diversity of form here referred to are also found in Canada. Of the fifty-four linguistic stocks which are enumerated north of Mexico, ten or eleven are spoken in Canada.

(1) *The Eskimo*, which is spoken all along the Arctic coast of our continent. At the present time it extends as far south as the southern coast of Labrador, while we have evidence that in former times it was spoken for a considerable distance along the shores of the Gulf of St. Lawrence, perhaps even on its southern side. The whole coast line of Labrador, the shores of Hudson Bay, with the exception of its extreme southern part, the inhabited islands of the Arctic Ocean, and the coasts of Greenland, with the exception of its uninhabited northeast portion, are the home of the Eskimo. Ruins of houses found all over the Arctic archipelago, and practically all along the coast of Greenland, indicate that at times their habitat extended much further to the north than it does now. Only in the regions west of Hudson Bay are Eskimo tribes found living far from the sea—on the large lakes and rivers with which that country abounds.

(2) *The Athapascan* or *Tinneh* (Déné). Numerous dialects of the Athapascan languages are spoken in the northern part of Canada. Athapascan tribes occupy the whole interior of Alaska and extend from there over the Mackenzie basin eastward towards Hudson Bay, and westward to the coast range.

Isolated Athapascan bands were also located in the Nicola and Similkameen valleys in southern British Columbia, and an offshoot of this family is found east of the Rocky Mountains near Calgary, forming part of the Blackfoot Confederacy. The western isolated Athapascan bands belonged to the large group of Athapascan tribes which are found all along the Pacific coast, extending through the States of Washington, Oregon, and California, and connecting with the Apache, Navaho and Lipan, the most southwestern tribes of this stock.

(3) *The Algonquin*. The Algonquin occupy practically the whole southern part of Canada east of the Rocky Mountains. By far the greatest number of Algonquin tribes belong to the central group. These include the Cree, who extend through the most northern part of the region occupied by the Algonquin tribes, from the Rocky

Mountains to the interior of Labrador, and the Ojibwa, who occupy the more southern part of the country. In the Atlantic region a number of distinct dialects are found, the principal of which is that of the Micmac of Nova Scotia.

At present a branch of the Siouan family, the Assiniboiné, inhabit a small part of the plains of Canada. Originally the habitat of this tribe was farther east and south.

(4) *The Iroquois*. In the eastern part of Canada, the Iroquois are found. Although their principal habitat was in the State of New York, a number of important tribes occupy the north side of the St. Lawrence River and the shores of Lake Ontario and Lake Erie.

(5) *The Beothuk* of Newfoundland have become extinct, but it seems probable that they represented a distinct linguistic family.

(6) *The Kootenay*. Proceeding westward from the territory occupied by the Algonquin stock, we find the Kootenay, who inhabit principally the valley between the Rocky Mountains and the Selkirk range, and speak an independent language.

(7) *The Salish*. West of them is found the important Salish family, occupying the whole southern interior of British Columbia and extending northward to the southern boundary of the region occupied by the Athapascans. In the southern part of the Pacific coast of British Columbia they have crossed the mountains and occupy the coasts of the Gulf of Georgia. Their territory extends southward into the United States, where they border on the Shapatin. An isolated Salish dialect is spoken on the Pacific coast, south of Columbia River, while another isolated dialect is spoken on the northern part of the coast of British Columbia on Dean Inlet. Salish is divided into a great number of dialects.

(8) *The Wakashan*. On western and northern Vancouver Island and on the coast of British Columbia, northward from the Gulf of Georgia, reaching to Douglas Channel, are spoken the Wakashan languages, which embrace the two important dialects of the Nootka and Kwakiutl.

(9) *The Tsimshian*. On the Skeena and Nass Rivers are located the Tsimshian, whose language differs fundamentally from those of all the neighboring tribes.

(10) *The Haida*. On Queen Charlotte Islands in the northern extremity of British Columbia the Haida language is spoken, which at present also extends into southern Alaska.

(11) Although outside of the limits of Canada, *Tlingit* or *Koloshan* must be mentioned, the last of the great linguistic stocks of the northern coast of the Pacific Ocean.

In the following pages a brief characterization of these linguistic stocks will be given.

(10) *The Haida*. On Queen Charlotte Island, in the northern characterized by a simplicity of consonantic clusters, by the avoidance of consonantic clusters at the beginning and at the end of words, by the occurrence of a considerable number of velars, stops as well as aspirates and nasals; by the absence of labiodentals and the occurrence of a number of palatalized l's. Its vowel system is simple. The word in Eskimo forms a firm unit, held together by word-form-

ing suffixes, which are of verbal, nominal and pronominal character. Derivations are formed exclusively by means of suffixes. Whenever a word appears provided with suffixes, it loses its word-forming elements, and in more or less modified form enters into composition with these suffixes.

The number of etymological suffixes is very considerable, 143 suffixes being counted, which may be attached to any verb or noun, the limits of their variability being determined only by the requirements of the sense. On account of the great variety of ideas expressed by these suffixes, the single Eskimo word often expresses ideas which in European languages are expressed by sentences. The etymological suffixes include not only the elements which transform verbs into nouns, expressing the ideas of the actor, the abstract noun, the passive participle, the place or time where something is done, instrument, etc., and also elements which transform nouns into verbs, like "to be," "to have," "to do something to somebody," "to use," "to become", etc., but also a very large number of adjectival and adverbial ideas like, "small," "nice," "ugly," "miserable," "only," "much," "very," "exactly," "for a little while," "badly," "more," "really," "entirely," etc. Many adverbial suffixes are more readily translated in English by subordination of verbs, such as, "to begin to do," "to cease to," "to be able to," "to desire to," "to intend to." To this group must be added also suffixes which have to be translated by our tenses, which, in Eskimo, are morphologically of the same order as the adverbial suffixes here described. Many of the suffixes here enumerated have very special significance, such as, "to smell," "to call," "to be tired of." As an example of etymological composition the following may be given:

Takusariartorumagaluarnerpâ? Do you think he really intends to go to look after it?

Takusar(pâ), he looks after it; —iartor(poq), he goes to;—uma(voq), he intends to—; —(g)aluar(poq), he does so—but—; —nerpoq, do you think he—.

It is evident, therefore, that much of the syntax of Indo-European languages is expressed in Eskimo, by means of etymological suffixes.

While the tenses of the verb, as mentioned before, are expressed by means of etymological suffixes, the modal development of the verb is quite considerable. The indicative, interrogative, optative, and three subordinate moods occur, in all of which the pronoun shows separate forms. The pronoun has also developed separate forms for the single intransitive subject and for all the combinations of subject-object. The compound forms expressing the relation of a pronominal subject and pronominal object have been so much modified that the component pronominal elements can no longer be clearly traced. The transitive forms of the verb expressing the subjects of the various persons combined with the object of the third person singular are closely related to the possessive form, so that the expression "I see him," is practically the same in form as the word, "my-seeing." This analogy becomes still more apparent when we consider the methods of expressing the subject of a transitive sentence and the possessor of an object. The Eskimo language possesses two cases, one of which, generally called the objective, is used for expressing the object of transitive verbs and the subject of intransitive verbs, while the second case, generally called subjective, is used



for expressing the subject of the transitive verb and the possessor. If this form be expressed by the English possessive case, we may translate the forms found in Eskimo as follows: "the man's, his house," or, "the man's, he sees him," which, as stated before, is in form analogous to the possessive, and might therefore be expressed by "the man's, his seeing him." The possessive forms have also a separate development for the subjective and for the objective, so that forms occur like "his house's, its door," where "his house's" would occur in the subjective form. It is important to note that these subjective forms of the possessive are analogous to one of the subordinate moods, so that a sentence like "I met him when he came" might be considered as analogous to the form, "his coming's, my meeting."

Eskimo has three numbers, singular, dual, and plural, which are expressed in the noun as well as in the verb. The demonstrative pronoun is highly developed, there being twelve distinct pronouns, which express position in relation to the speaker, the person addressed, and the person spoken of, also distance, directions to the right, left, in front, behind, above, and below the speaker, and probably also the direction south and the position at a distance from the speaker in relation to the house, namely, outside, when he is inside, and inside, when he is outside.

Since etymological suffixes do not embrace any local adverbs, local relations are expressed by means of nominal suffixes, expressing the ideas of "to," "from," "through," "towards," "by means of," and "like."\*

(2) *Athapaskan*. The Athapaskan or Déné languages, notwithstanding their wide distribution and dialectic differentiation, have preserved the same fundamental grammatical traits. Their phonetics are rather harsh, the vowel system variable. They lack all traces of reduplication and use for expressing grammatical concepts principally composition and position, to a less extent phonetic changes of the stem. The restriction of the use of certain stems, particularly of verbs, to the singular, dual, or plural number, or to certain tenses, or even to certain persons, is developed to an unusual degree in this linguistic family. Although this feature is primarily a lexicographic character, it is used to such an extraordinary extent by all the Athapaskan dialects, that it must be mentioned in a morphological sketch of the language. The change of stem occurs particularly in verbs expressing kinds of motion, position, mental action, in verbs expressing actions done by certain instruments and in some other verbs not readily classified. The same characteristic changes, although too a much more limited extent, occur in other Canadian languages, like Tsimshian, Salish, and Kwakiutl.

The number of etymological affixes which transform verbs into nouns is small; most nouns being independent stems. Verbal phrases have, however, often a denominating function. Many compound

\*S. Kleinschmidt. *Grammatik der grönländischen sprache*. Berlin, 1851.  
Theodor Bourquin. *Grammatik der Eskimo-Sprache*. Gnadau, 1891. (Labrador.)

E. Petitot. *Vocabulaire Francais-Esquimau*, Paris, 1876 (Mackenzie River).

Francis Barnum. *Grammatical Fundamentals of the Innuitt Language*. Boston, 1901. (Alaska.)

William Thalbitzer. *A Phonetical Study of the Eskimo Language*. Copenhagen, 1904.

nouns are formed by juxtaposition. A true nominal plural and dual are not found, but these ideas are expressed by suffixes expressing "many" and "feet" "(i.e., two). Only a few terms designating animal beings have in their plural form a suffix that cannot be explained in this manner. There is no formal classification of nouns according to sex, form, animation, but classes are distinguished by the use of distinct verbal stems relating to states or acts of objects of different form.

Verbal forms originate by composition of an extended series of elements which are quite varied in character and very numerous. In many compounds they are also apparently so equal in weight, that the distinction of affixes and stems is somewhat arbitrary. Ordinarily the essential idea is expressed by the terminal element which is regularly preceded by pronominal elements and which, therefore, may be considered as the stem to which the others are prefixed. Suffixes seem to express only syntactic relations.

The first group of component elements express ideas like those of completion, negation, repetition, but also many local ideas, like: out of, through, back towards the speaker, back from the speaker, falling, rising. In compounds these may be followed by another group expressing adverbial ideas like: up, down, into, hardly, badly, well. Besides these two classes there are many nominal elements which are used as prefixes immediately preceding the verbal stem with the pronominal subject. These express locatives and instrumentals; for instance, in the air, on the ground, in water, in fire, with the hand, with the foot, with the back.

Possession is expressed by the pronominal elements which precede the noun. In many cases their connection with the noun is so close that the initial sound of the latter is modified when preceded by possessive elements.

The verb in syntactic construction with pronominal subject takes its pronominal element following the etymological prefixes before described, and preceding the terminal verbal stem of the compound. Although the pronouns for different tenses and different verbs seem to be derived originally from the same forms, they are so much differentiated in the present state of the language, that they appear in quite different forms in aorist, present, past, future, and imperative. Each tense seems to contain certain characteristic phonetic elements which have become closely amalgamated with the pronouns. Furthermore, different classes of verbs have different characteristic elements—on the whole vocalic—which precede the pronoun. These vocalic elements may have had a separate meaning at one time, but their significance is not apparent, and they give the impression of purely formal elements.

The subjective pronoun has a singular and a dual. The plural is formed from the dual by an additional element preceding the dual form and, in some cases, by slight modifications of the dual forms.

The objective pronouns differ from the subjective ones, and are identical with the possessive forms. In transitive verbs the pronominal object precedes the subject with which it forms contractions. In a great many cases the verb has an indirect object which is expressed by means of postpositions. In sentences which have nominal subject and object, the object always precedes the verb with which it

forms a firm unit. The subject either precedes the object, or it is placed at the end of the sentence, following the verb.\*

(3) *Algonquin*. Of the numerous Algonquin dialects the western, central and eastern groups are represented in Canada. The Blackfoot belongs to the western group, and differs very much from the other groups. The central group is represented by the Cree and Ojibwa with their subdialects, while the Micmac of Nova Scotia is the characteristic type of the eastern group. The following remarks are based primarily on the central dialects.

The grammatical processes employed in Algonquin are varied. Prefixing, suffixing, vowel change and reduplication are utilized for expressing grammatical categories. The etymological structure of the word is very complex. The method of composition is somewhat different in nouns and in verbs. In the latter generally two important component elements are found which are apparently nearly co-ordinate in value. Since, however, the total number of initial stems is much greater than that of second place stems, the former appear on the whole as primary, the latter as subsidiary elements. The ideas expressed by either group are very general and qualify each other. Many initial stems express ideas of motion in a certain direction, while secondary stems express more often concepts of manner of motion, such as "slowly," "quickly." Other ideas, however, all of a very general character, are expressed by these stems. Initial stems convey ideas like: to busy oneself with a fluid, to wipe, association, beginning, completion. Secondary stems comprise not only modal ideas like those expressed by our adverbs, but also those of form, like: relating to a hole, matter at rest; and in a more general way qualities, such as color, mental state, feeling; and limitations of space, like relations to parts of the body. Still another group of stems follow in position the secondary stems here described. Many of these designate manner of motion, as to dance, to swim, to move through air, to crawl, to move on land. These elements are often followed by classifying elements, to most of which no definite meaning can be ascribed. In a similar position, following the initial or secondary stems, occur instrumentals which express ideas like: to do with the hand, the mouth, with a point or general causality.

These elements occur, also, in nouns in which sometimes a secondary stem may appear in initial position. The noun has also many generic suffixes denoting ideas like: fluid, string, fruit, instrument.

Reduplication is used to express intensity of action, customary action, continuity, repetition, distribution and duration.

All objects are classified as animate or inanimate, and this distinction pervades the whole language, animate and inanimate gender being expressed in the noun, pronoun, and verb. Plurality is also always expressed.

The pronominal elements used in syntactic construction of verbs are quite complex. They differ considerably in different tenses, and particularly in moods. The forms expressing the combination of pro-

\*E. Petitot. Dictionnaire de la langue Dènè-Dindjié. Paris, 1876.

A. G. Morice. The Déné languages. Canadian Institute Transactions, 1891. Vol. I., pp. 170-212.

Pliny Earle Goddard. The Morphology of the Hupa Language. Berkeley, 1905.



nominal subject and object are so much specialized that their relation to the simple pronominal forms is quite obscure. First and second persons, third person animate, third person inanimate, inclusive, exclusive, are distinguished, and in the plural occur second person and third person animate and inanimate. First and second persons indicative are prefixed while the third persons are suffixed. The inclusive has the second person prefix and a special suffix; the exclusive has the first person prefix and the same suffix. In the future tense the prefixes amalgamate with a future element.

In dependent clauses an entirely different set of pronominal elements is employed, which contains only suffixes. Various types of subordination are expressed by pronominal elements, most of which are related to this series. Various prefixes differentiate temporal, causal, and other forms of subordination. The exuberance of these forms is quite remarkable.

In transitive verbs in the indicative mood the prefixes of the first and second persons reappear. Whenever the second person appears in subject or object its prefix is used, while that of the first person is used only in relation to the third person. The multitude of forms of the dependent moods is here, of course, still greater than in the intransitive verb. In most dialects identity and difference of several third persons occurring in a sentence and relating to preceding sentences are expressed with great nicety.

In the substantive three syntactic cases occur: subjective, objective, and locative, to which may be added a vocative. Possession is expressed by prefixed personal elements and by suffixes which differ in singular and plural, animate and inanimate. In these forms, also, the cases above mentioned are distinguished, and, in the third person, the relation of the possessor to the other third persons contained in the sentences modify the possessive forms.

Owing to the high development of syntactic, particularly pronominal forms, and the close amalgamation of etymological elements the word of the Algonquin languages presents a firm unit.\*

(4) *The Iroquois*. The Iroquois is spoken in a number of closely related dialects by tribes whose habitat was in the region of the Great Lakes. The stock embraces two important groups of languages, the Iroquois proper, and the Cherokee, the latter originally spoken in the southern Alleghanies. The Iroquois proper differs in phonetic character and in form considerably from other Canadian languages. The system of consonants is very meager. We find no labial stops, but

\*F. A. Cuoq. *Etudes philologiques sur quelques langues sauvages de l'Amérique*. Montréal, 1866.

F. Baraga. *A Theoretical and Practical Grammar of the Otchipwe Language*. Detroit, 1850; Montreal, 1878.

F. Baraga. *A Dictionary of the Otchipwe Language*. Cincinnati, 1853; Montreal, 1878, 1880.

E. F. Wilson. *The Ojebway Language*. Toronto, 1874.

A. Lacombe. *Dictionnaire et grammaire de la langue crise*. Montreal, 1872, 1874.

F. W. Tims. *Grammar and Dictionary of the Blackfoot Language*. London, 1887.

S. T. Rand. *Dictionary of the language of the Micmac Indians*. Halifax, 1888.

A. S. Maillard. *Grammar of the Mikmaque Language*. New York, 1864.

Wm. Jones. *Principles of Algonquian Word-Formation*. *American Anthropologist*, N.S., Vol. VI., 1904, pp. 369-411.

only two dentals and one palatal, both surds and sonants. The spirant series is more fully developed, including an *f*, various dentals and palatals. Among the nasals only *n* and *ñ*(*ng*) occur. An *r*, which is common, shows close affinity to *l*. A very weak breath, and the glottal stop occur also. Nasalized vowels are common.

Grammatical processes are essentially prefixing and suffixing. Reduplication is absent, but intricate phonetic changes are very frequent. Denominating terms are classed as masculine, non-masculine, and indefinite; but also as animate and inanimate. Singular, dual and plural are distinguished. In the verb many adverbial ideas, such as tense and habit, are expressed by derivative affixes. The passive is expressed in the same manner. Temporal forms are quite numerous, while there are only three moods, the indicative, one subjunctive, and the imperative. On the whole, however, the verb is not rich in derivational elements, and local adverbial affixes are not found, different verbal stems expressing the idea of motion in various directions, such as up, down, into, out of, etc.

Syntactic relations of inanimate nouns and verbs are ordinarily expressed by incorporation of the noun in the verb, the noun being placed between the prefixed pronoun and the verbal stem, in the same manner as is done in Kootenay, Shoshone, and Nahua. In this case the noun loses its word-forming prefixes, the most common of which are *o*— and *ga*—, while it is increased by certain new suffixes. The subject of the intransitive as well as the object of the transitive are thus incorporated. For this reason adjectival terms appear also generally as intransitive verbs with incorporated nominal subject. Animate nouns are not thus incorporated. The animate subject precedes the verb, the animate object follows it.

In the noun, singular, dual, and plural are distinguished. Both have the same suffix, but the dual has besides a prefix derived from the numeral “two.” The independent pronoun shows no distinction in the first and second persons between singular, dual and plural, while the third persons differ in singular and plural. A similar lack of distinction appears in those combinations of subject and object in which the two differ in number. In this case the form remains the same, no matter whether subject or object are singular, *viz.*, dual or plural. The possessive pronoun and the objective pronoun are closely related. Both possess eleven forms: first and second person singular, dual, and plural, third person masculine and non-masculine singular and plural, and indefinite. The subject of the verb, on the other hand, has fifteen forms: first, second, third person masculine and non-masculine, in singular, dual and plural, indefinite, and a subdivision of the first person dual and plural in inclusive and exclusive. It is very remarkable that the locative forms of the possessive, expressing “at, like, in, under, near,” have the same set of fifteen forms, as though they were really verbs. The transitive forms include the object and the component elements are highly modified. All pronouns are prefixed to nouns as well as to verbs. Various classes of words present variations of the pronominal forms which affect principally their terminal sounds. Similar variations occur in plural forms as well as in the endings of incorporated words referred to before. These modifications are apparently quite irregularly distributed and have not, so far, been brought into such order, that the type of a word would indicate the class of modification that has to be used.

(5) *Beothuk*. Practically nothing is known of the grammar of the Beothuk, the only available material being a few brief vocabularies.\*

(6) *The Kootenay* (by A. F. Chamberlain). The Kootenay is spoken in two dialects, the Upper and Lower Kootenay, which, however, differ only slightly in phonetics, grammar, and lexical material. In phonetics the velar stops abound, likewise, the broad lateral stop (similar to *tl*) which is so characteristic of many western languages. Surds and sonants are difficult to distinguish. The language does not possess the consonants *b*, *v*, *f*, *r*. The *e* and *i* series and the *o* and *u* series are interchangeable.

The indefinite *e* is common. Reduplication has no rôle in Kootenay, occurring only in a few words of onomatopœic origin (chiefly bird names), even the *pusp* ("cat") of the Chinook Jargon has been reduced to *p*. Words of onomatopœic type seem, likewise, rare. Monosyllables are very few, the characteristic word being evidently a compound.

The Kootenay language possesses a very large number of suffixes and prefixes, the terminal *-tl* and initial *aq-* (*aqk-*) being very common the latter, indeed, occurs in several hundred words, and is a notable feature of this interesting tongue. Another marked characteristic of Kootenay is the incorporation (after the fashion in Nahuatl) of noun-objects and also pronominal objects in the verb. Besides composition by juxta-position of independent words and by means of radicals with other suffixes and prefixes, Kootenay has a series of "radical suffixes," used in composition to express actions done with the various members of the body (also in water, in fire, etc.). Thus, from the radical *it-* ("to do") are formed *itqane*, "he bites" (*-qa*—"with the teeth"); *itkine*, "he does something with the hand" (*-kin*—"with the hand"); *itqoine*, "he lies down" (*-qo*—"with the back"). The "radical suffixes" are not at all related to the terms for the members whose actions they denote (the root of the word for "back," e.g., is *-tlak*).

There is no grammatical gender in Kootenay. The noun has an indefinite suffix *-nam* (*titonam*, "father of some man," *aqkitlanam*, "somebody's house"); an oblique case *-es* or *-s*, plural form in *-nintik*, a dual in *-kistik* and a distributive in *-kantik*. The form of a noun used in composition is different from that of the same word used independently (e.g. *aqkinmituk*, "river," *náimanmitukine*, "there are two rivers;" *aqko'kile*, "horn," *quwitlk'tle*, "big horn." here the composition-forms are *-mituk* and *-kile* respectively). As a rather lengthy compound may be cited *aqkinkanu'ktla'mnam*, "crown of the head," composed of *aqkink'an*, top," *-uk*, "point," *-tlam*, "head," the first part being further separable into *aq-*, *-kin*, *-k'an*, the last the radical suffix, apparently for "top," and *-kin* another interpretative particle. As an instance of verbal composition may be given *tsqatlitqanawasine* "he is going to bite us," resolvable into *asqatl-* (particle indicating the future), *itqane* (from *it-* to do," *qa-*, "with the teeth"), "bite," *-awa*, "he. . . us," *-ine* verbal auxiliary.

The adjective usually precedes the noun. Of the numerals four (*qaetsa*) and eight (*woqaetsa*) are related, the latter meaning "second four." The third personal pronoun, *ninko's* ("he, she"), is derived from the second, *ninko* ("thou"). The subject-pronouns used

\*A. S. Gatschet. Proceedings of the American Philosophical Society, XXII., 1885, pp. 408-424; XXIII., pp. 411-432.



with the verb are different from the independent personal pronouns. The possessive is related to the personal.

The sign of the future tense in the verb is *tsqatl-*, of the past *ma-*. There is an auxiliary verb (radical *-i-*), which often, corresponds to our "to be" e.g., *sukine*, "it is good," *ipine*, "he is dead," *wagine* "it is thick," etc. Several particles of negation and privation exist. The radical of the verb can be obtained by removing the termination of the second singular imperative (e.g., *ike*, "eat thou" radical *ik-*, "to eat." The letters employed here have their continental sounds.)

While the Kootenay stands alone lexically, some of its peculiarities of morphology suggest comparison with the Shoshonean (Nahuatl) Athaspascan and Siouan stocks.\*

(7) *Salish*. The Salish may be divided into two large groups, the Salish of the interior and the coast Salish. The former group embraces the Calispelm, which is spoken by the Pends d'Oreilles, Flatheads, Spokane, Cours d'Alène, Okanagan; the Shuswap of eastern British Columbia; the Thompson Indian language, which is spoken in the region of the confluence of the Thompson and Fraser Rivers and in the canyon of the Fraser River; and the Lillooet. The coast Salish dialects extend from the coast of northern Oregon as far north as Dean Inlet. They may be divided into a number of groups; the Tillamook, south of Columbia River, separated from other Salish dialects by the Chinook; the Chehalis group, spoken on the outer coast of Washington and probably closely related to the Upper Chehalis and Cowlitz, which dialect is spoken in the valley extending from Puget Sound southward toward the Columbia River. On Puget Sound is found a group of dialects, the representatives of which are the Puyallup and the Nisqualli. The isolated dialect of the Twana is found in the southwestern part of Puget Sound. North of this group are found the dialects represented by the Songish of Victoria. These include the Clallam of the south coast of Juan de Fuca Strait and the Lummi south of Mt. Baker. North of this group are located the dialects of Cowichan, including the Cowichan proper and the Nanaimo of Vancouver Island, and including dialects spoken in the Fraser River delta. On the mainland north of the Fraser delta, on Burrard Inlet and Howe Sound, an isolated dialect is found—the Squamish. The dialects north of these groups, embracing the Sechelt of Jervis Inlet, the Claamen of Toba Inlet the Puntlatch of Comox and the Comox, formerly of Cape Mudge, may be combined in a single group. Separated from these by a stretch of country inhabited by Wakashan tribes are found the Bella Coola of Bentinck Arm and Dean Inlet.

The phonetics of all the Salish dialects are characterized by a very strong tendency towards clustering of consonants, a superabundance of s, l, and k sounds, with a strongly developed velar series; and the inclination to weaken and eliminate vowels. The labiodentals are absent. In the coast dialects no r sound is found, which, however, occurs in some of the dialects of the interior. The most southern coast dialect, the Tillamook, has lost all its labials, while the elimination of vowels has developed most extensively among the most northern tribe of the group, the Bella Coola. The process of disintegration has proceeded so far in this dialect that a considerable

\*F. Boas, in Report of the 59th Meeting of the British Association for the Advancement of Science. 1889. pp. 889-892.

A. F. Chamberlain, Ibid. 62nd Meeting, 1892. pp. 589-615.

number of words are found which have lost all their vowels; as, for instance, smnt (mountain), tq̄t (stone), sts (salt).

The tendency to elimination of the vowels seems to be closely connected with the extended use of reduplication, accompanied by a weakening of the stem vowel.

The grammatical processes applied in all the Salish dialects are prefixing, suffixing, reduplication, and vocalic changes of the stem. Grammatical forms are often influenced by laws of euphony. A very considerable number of stems, particularly of verbal stems, are restricted in their use either to singular or plural. In transitive verbs the use of singular or plural stems and forms is determined by the object, not by the subject.

The number of etymological affixes is considerable. Most of these are suffixes. There seems to be a complete absence of instrumental etymological affixes, while the number of local elements is very considerable. Prominent among these are a great number of suffixes indicating parts of the body, which, although practically local in character, are used to express the objects of transitive verbs, as, for instance, "I strike his hand" would be "I hand-strike him." Verbal nouns and elements transforming the noun into verbs are numerous. There are also many suffixes or other derivative elements which express ideas that might be expressed by auxiliary verbs or adverbs. Among these may be mentioned causative, duplicative, (formed by reduplication), iterative, often formed by a prefix; frequentative, formed by a suffix; diminutive, formed by a prefix; reciprocal, reflexive, collective, and desiderative. Many adverbial local ideas are expressed by verbal prefixes. Such are into, from, on, etc. Similar ideas may also be expressed by affixes of nouns. Verbal nouns are quite numerous and are formed by the use of prefixes and of suffixes. The demonstrative has in most of the Salish dialects a double development, designating presence and absence, as well as visibility and invisibility.

There are some remarkable differences in regard to the ideas expressed by grammatical processes in the coast Salish, as compared with the dialects of the interior. In the dialects of the interior no trace of grammatical gender is found. The tendency to form compounds is very strong, and in one at least of the dialects of the interior a distinction is made between the inclusive and the exclusive first person plural.

In the coast dialects there is a strong development of grammatical gender, which, however, is found only in the pronoun. In this the coast Salish dialects resemble the Chemakum and the Chinook. There is no indication of inclusive and exclusive plural forms, and it would seem that the complex verbal forms of the dialects of the interior have undergone some disintegration. There is a very extended use of auxiliary verbs in the coast dialects, more so than in the interior.

The numeral systems of the various groups of dialects show important differences. It would seem that different groups of radicals are used in the various dialects. In counting, the objects are classified by means of suffixes according to form. The local suffixes referred to before are also used in classifying numerals. The numerals for counting animate objects are formed by reduplication, those used for counting persons, either by another kind of duplication or by triplication.



The possessive pronoun is expressed partly by prefixes, partly by suffixes. Its form depends often upon the initial sound of the noun. The pronominal elements of the verb have apparently different forms for different tenses. This, however, is probably due to a contraction of the pronoun with temporal elements or prefixes. Similar changes in pronominal forms occur in various moods. The transitive verb incorporates pronominal forms expressing both subject and object, and these are evidently derived from the simple pronouns, but considerably modified and have different forms for different tenses. In the coast dialects there is a strong tendency to separate the subjective from the objective pronoun whenever the verb is accompanied by an adverb, the adverb being treated as an intransitive verb, while the transitive verb retains its object.\*

(8) *Wakashan*. The *Wakashan* is divided into two principal dialects, the *Nootka* and *Kwakiutl*, which are distantly related. The *Kwakiutl* is spoken in three principal dialects, and the dialect of northern Vancouver Island is selected here for describing the principal characteristics of this linguistic family. The phonetic character of the *Kwakiutl* is similar to that of other North Pacific languages. The language avoids, however, such clusters of consonants as are frequent in *Salish*. The words begin with a single consonant. The *k* series is very fully developed, the three series of anterior and medial palatals and of velars being present. The "l" series is also very fully developed, the sonant, surd, fortis, aspirate, and paltalized "l" being found. Every single stop occurs as sonant, surd, and fortis. Nasals are rare, only *n* and *m* occurring. The *r* and dento-labials are absent. The vowels are quite variable; probably only an *e*, *a*, and *o* series are found. All words occur with word-forming suffixes. There is a great abundance of etymological suffixes, which are joined to words in a way similar to that found among the *Eskimo*, namely, after a loss of the word-forming suffix of the stem and with modification of the phonetic character of the stem. No prefixes occur and all grammatical relations are expressed by means of suffixes or by reduplication and by *umlaut*. Reduplication is abundant and serves a variety of purposes, so that under certain conditions, even triplication may occur. The etymological suffixes express a very great number of ideas. Some transform verbs into nouns, others nouns into verbs. To the former class belong suffixes

\*G. Mengarini. *Grammatica Linguae Selicæ*. New York, 1681.

Giorda. A Dictionary of the *Kalispel* Language. St. Ignatius Print. Montana, 1877-79.

F. Boas. Grammatical Sketches of *Bella Coola*, *Nanaimo*, *Shuswap*, *Lillooet*, *Okanagan*, in Report of the 60th Meeting of the British Association for the Advancement of Science, 1890, pp. 679-715.

F. Boas. Grammatical Sketch of the *Thompson* Language. Ibid. 68th Meeting, pp. 654-663.

C. Hill-Tout. (The same dialect.) Ibid. 69th Meeting, pp. 22-38.

F. Boas. *Bella Coola* Texts. Proceedings American Philosophical Society, Vol. XXXIV., 1895, pp. 31-48.

C. Hill-Tout. Grammatical Notes on the *Squamish*. Report of the 70th Meeting of the British Association for the Advancement of Science, 1900, pp. 495-518.

—— Grammatical Notes on the dialects of the *Fraser River Delta*. Ibid. 72nd Meeting, pp. 17-48, 63-89.

—— Grammatical Notes on the *Sechelt*. Journ. Anthropol. Inst., XXXIV., 1904, pp. 58-91.

—— Grammatical Notes on the *Lillooet*. Ibid. Vol. XXXV., pp. 156-218.



indicating the actor, the abstract noun, the instrument, place, time, passive participle, etc. To the latter class belong suffixes like those expressing "to make," "to desire," "to obtain," "to have," etc. Besides these, adverbial suffixes are very common. Most numerous among these are the local suffixes, expressing the place where an action occurs, as, "in the house," "on the ground," "in the water," "on the beach," "on the rocks," etc.; temporal ideas, as, past, present, and future, transition from existence to non-existence, inchoative, continuative, exhortative, dubitative, and others. Even a considerable number of our conjunctive ideas are expressed in the same manner. A number of these suffixes have very special meanings. Adjectival suffixes are not numerous. Among the local suffixes mentioned one class deserves special attention, namely, the group of suffixes indicating parts of the body. These are used quite frequently with transitive verbs, and as in Salish, acquire an objective meaning signifying the part of the body to which an action is done, not the instrument, such as we find in the Siouan, Kootenay and Athapaskan languages. There are, however, a small number of instrumental suffixes which indicate the organs with which an act is performed, as "with the hand," or "with the eyes," or, "with the sense of smell."

The idea of plurality is not strongly developed. Where the idea of distribution or the idea of collectivity is to be expressed reduplicated forms are used.

The development of the demonstrative pronoun is very remarkable. Three positions are distinguished, that, near the speaker, near the person addressed, and near the person spoken of, or, first, second or third person demonstrative. Each of these occurs in two forms, as visible and invisible. All these demonstrative ideas are expressed by means of nominal and verbal suffixes, which possess certain differences in form, so that the total number of demonstrative forms is very great. In every sentence the location of subject and object is expressed by the proper demonstrative suffixes.

The syntactic relation of parts of the sentence is expressed exclusively by three forms of the pronoun, the subjective, the instrumental (genitive) and objective. For instance, the sentence "I strike him with it," would be expressed in the form, "strike-I-him-with-it." These pronominal elements are, on the whole, phonetically weak, consisting only of a single sound. When subject, object, or instrument are nouns, these nouns are placed immediately following the pronominal element designating their grammatical function, so that the sentence, "the man strikes him with it" would have the form, "strikes-he-the-man-him-with-it." On account of this peculiar position of the noun, the weak pronominal elements become apparently suffixes to the noun. This becomes still more apparent in the case where, for instance, the object is expressed by a noun, as, "he strikes the child with it." "Strikes-he-it-the-child-with-it." This insertion of the noun in the verb with its pronominal suffixes makes the syntactic word-unit very indefinite. Obviously the whole sentence must be considered as a unit; its breaking up into words is entirely arbitrary.

A very peculiar process which is closely related to the preceding is, that wherever possessive pronouns occur, they combine regularly with the pronominal elements, and in this way become detached from

the nouns to which they belong. While the word-complex "my-child" is expressed by the word "child" with the suffix "my," the sentence "he strikes my child with it," takes the form "strikes-he-it-mine-child-with-it." Or, in the same way, "my friend comes," will have to be expressed in the form "comes-he-mine-friend." Related to this phenomenon is also the tendency of Kwakiutl to break up its transitive verbs whenever they are accompanied by adverbs, into an intransitive verb and a transitive verb. For instance, "I did not see him" would be expressed by "not-I seeing-him," "not" being treated as an intransitive verb, while "to see" takes only the object. The whole series of forms of the pronoun which develops from this peculiar treatment in combination with the demonstrative pronouns is very numerous, and exhibits a considerable number of peculiar irregularities.

Since many of our conjunctions and modal ideas are expressed by etymological suffixes, the modal development of the verb is very slight. There is practically only one mood: the indicative, although the imperative and exhortative have a number of peculiar forms.

Subordination of sentences is accomplished almost exclusively by means of nominal forms, in which an interesting transition of the demonstrative to the personal pronoun takes place, the demonstrative of the first, second, and third persons being always used to express subordination of sentences with first, second and third person subject. For instance, the sentence, "the wind began to blow when I came," might be translated literally "the wind began to blow at this (my) coming;" and "the wind began to blow when he came," by "the wind began to blow at that (his) coming." In both of these cases, the demonstrative pronouns are sufficient to express the personal pronoun.

It seems worth while to mention the use to which reduplication is put. The most common form of reduplication is that used for expressing distribution of plurality. Ordinarily this reduplication is used with the vowel *e*. Diminution is expressed by reduplication with the vowel *a* combined with a suffix. "To endeavor to do" is expressed by reduplication with the vowel *a* combined with a suffix. "To eat something" is also expressed by a peculiar reduplication of the stem of the noun.

Numerals are formed on the decimal system. They take classifying suffixes, the most important of which are those for designating human beings, round, long, and flat objects.\*

(9) *Tsimshian*. The dialects of Tsimshian show no considerable degree of differentiation and the description of one of them will be sufficient to illustrate the characteristic points of the morphology of the language. The phonetics of Tsimshian do not differ much from those of the other languages on the north Pacific coast, but the Tsimshian proper seems to be most closely related in its phonetic character

\*F. Boas, in Report of the 60th Meeting of the British Association for the Advancement of Science, 1890, pp. 655-679; also 1896, pp. 585-586.

——— Sketch of the Kwakiutl Language. *American Anthropologist*, N.S., Vol. II., pp. 708-721.

A. F. Hall. A Grammar of the Kwagiutl Language. Trans. Royal Society of Canada, 1888. II., pp. 57-105.

F. Boas and George Hunt. Kwakiutl Texts. Publications of the Jesup North Pacific Expedition. Vol. III. Leiden, 1905. Vol. X., Part I., Leiden, 1906.

to the Tlingit of Alaska. The use of the fortis is not common, if it occurs at all, and there is a tendency to transform the velar sonat *g* into a very weak velar *r*. Considerable clusters of consonants occur in the middle and at the end of the words, but consonantic clusters at the beginning of words are not common. The grammatical processes found in Tsimshian are prefixing, suffixing, and reduplication, with a very strong preponderance of prefixes which, however, generally remain phonetically separate from the word stem. The structure of the language is such that the unit of the word is ill defined and it is arbitrary whether the prefixes here referred to are considered as portions of the word or as proclitic particles.

A very great variety of ideas are expressed by means of prefixes or proclitic particles. These ideas are both verbal and nominal. They embrace an extensive group of local adverbial ideas, such as, "into," "out of," "from land to sea," "from sea to land," "up river," "down river," etc. All local adverbial prefixes have either parallel independent nouns of location or parallel nominal prefixes, so that the expression "he goes down to the beach," would be translated in Tsimshian, "down-to-the-beach-goes-he to the beach." Or in case where there is a parallel prefix we find expressions like "Intogoes-he to inside-house." There is also a large number of modal prefixes, for instance, "properly," "improperly," "well," "miserably," "in the dark," etc.; and there are others which correspond to ideas that we are accustomed to express by means of conjunctions. The principal one among these expresses the idea of cause and is used often for expressing causal relation of sentences. Besides these, a considerable number of particles are found which seem to have a somewhat greater freedom of position, and although they carry no accent and are proclitics, they seem to be somewhat different in type from the etymological prefixes, although closely related to them. To this group belong particularly the temporal and semi-temporal ideas, such as past, present, future and their combinations, also ideas like "on his part," "again."

The difference between the two groups of proclitics is that the former always form a unit with the verb and cannot be separated from it by any other syntactic elements, while the latter are often separated from the verb by pronominal elements. It is obvious that with the great development of these proclitics or prefixes a very large portion of the ideas which in other languages are expressed by syntactic processes become in Tsimshian part of etymological processes, and reduce the frequency of occurrence of subordinate clauses.

The idea of plurality shows a very remarkable development in Tsimshian. The method of forming the plural is the same in both nouns and verbs. A considerable number of verbs which, however, cannot be classified, the names of animals, with few exceptions, and miscellaneous groups of nouns have no separate forms for singular and plural. By far the greatest number of words form their plural by reduplication with weakened stem vowel, the reduplication extending to the first consonant following the first vowel of the stem. Still another class of words forms its plural by prefixes. There are two entirely different groups of prefixes of this kind: one group beginning with the velar *k*, the other beginning with an *l*. The latter group has a strong tendency to irregularity. We also find certain groups of words, the plural of which is formed by combined pre-



fix and suffix. The number of stems, the use of which is restricted either to singular or to plural, is very great. Cases of this character occur even among the etymological prefixes.

The personal pronouns and the possessive pronoun have two distinct forms: one group is used to express the possessive pronoun, the subject of the intransitive verb and the object of the transitive verb; while the second group embraces the subject of the transitive verb. These two groups of pronouns are entirely distinct; while the former are suffixed and coalesce with the nominal and verbal stems, the transitive subject is prefixed and remains phonetically as independent as the etymological prefixes. The difference in treatment of the two groups characterized before as etymological prefixes and as proclitic particles, consists in the position of the subject of the transitive verb, which in the second group is always placed following the proclitic particle; while in the first group it always precedes the verb with all its etymological prefixes. The modal development is slight. Passive and medial forms are found with great frequency. They are formed by means of suffixes which depend upon the character of the terminal consonant of the verb. The interrogative is formed by the suffix *a*. The imperative is generally expressed by the phrase "It would be well if you did so and so" combined with the future.

Owing to the strong tendency to incorporate local ideas in the verb, the Tsimshian has no nominal cases, syntactic relation between the parts of the sentence being expressed by a consonantic suffix, which indicates that the word provided with the suffix has a syntactic relation to the following word. This consonantic connection differs according to various classes of words, it has a definite form used with proper names, terms of relationship and pronouns, and another one used with common nouns.

The demonstrative ideas of absence and presence are expressed by means of suffixes. In other dialects this idea is not so rigidly expressed.

There is an indefinite preposition which is used to express all local, temporal and modal relations, its sense being determined partly by the verbal etymological prefixes, partly by the parallel nouns referred to before.

Subordination of sentences is generally brought about by means of nominal constructions, which in the case of temporal subordination are introduced by the temporal proclitics, which, however, often assume the sense of finality or causation. The subordination of negative sentences is brought about by transforming the verb into a noun and giving it an etymological prefix signifying "without." There are only two demonstrative pronouns expressing presence and absence, but, as indicated before, demonstrative position is expressed throughout by means of syntactic connectives.

The numeral system shows a very peculiar development. There are separate sets of numerals used for counting, and for enumeration of men, long objects, flat objects, measures. In some cases the numerals of the various series are derived from distinct stems, while in other cases, classes are indicated by suffixes.

Notwithstanding the great number of clearly defined etymological prefixes, and the much lesser number of etymological suffixes, the analysis of Tsimshian stems, verbs as well as nouns, is difficult. While among most of the neighboring languages it is easy to isolate brief stems, Tsimshian stems are apparently complex. This seems

to be due partly to a tendency to contraction, the rules of which have not been discovered so far. Since many of these stems are long, while at the same time there is considerable similarity in certain endings, it seems plausible that the Tsimshian stems, as we know them at the present time, have undergone considerable change, so that without a comparative study of the dialects and a more thorough knowledge of the grammar their history cannot be traced.\*

(10) *Haida*. The Haida is spoken in two slightly different dialects on Queen Charlotte Islands and in the southern part of the Prince of Wales archipelago. Until about one hundred and fifty years ago, the language was entirely confined to the Queen Charlotte Islands.

The phonetic system is quite similar to that of the more southern languages of the north Pacific coast. The vowel system is simple, and there is no clear distinction between the *i e* series, on the one hand, and the *u o* series on the other. The anterior palatals, which are prominent in other languages of the north Pacific coast are absent. Labials are very rare. All the stops occur as sonant, surd, and fortis. The nasal *ñ* (ng) is very common. In the northern dialect the velars are often very much weakened. The only processes by which grammatical ideas are expressed, are prefixing and suffixing, the function of each part of the sentence being determined also by position. Reduplication and diæresis are absent, with the exception of one or two doubtful cases. There is a strong tendency to build up complex words by means of composition of independent stems.

The etymological analysis of words shows them to be compositions partly of stems, which also occur independently, partly of subordinate elements that have no independent existence. Among the ideas that are expressed by etymological processes, those concerning instrumentality deserve particular mention. Action done by means of the back, by shooting, pushing, pulling, by walking, by stamping, grinding, chopping, with the hand, with a stick, by fire, etc., are expressed by means of prefixes. While most of these occur only as subordinate prefixes, a considerable number of them are identical with the nouns designating the instrument, as, for instance, to do with the foot, or to do with the hand, or by canoe, which are expressed by the independent words designating these objects.

Another prominent group is that of classifiers. These are used with verbs as well, as with numerals and nouns. The ideas thus expressed are essentially those of form, like flat, cubic, ring-shaped, cylindrical, long, etc. The total number of these classifiers is remarkable, there being about twenty-five in all.

While these two groups of ideas are expressed by prefixes, locative ideas are expressed by suffixes. We find here suffixes expressing motion into, out of, across, downward, upward, under water, towards a shut place, towards an open place, etc. Of similar character are temporal suffixes, which indicate the past, a quotative past, and future. There are also semi-temporal suffixes signifying con-

\*F. Boas, in Report of the 58th Meeting of the British Association for the Advancement of Science, 1888, pp. 878-890; also 1895, pp. 521-524, 1896, pp. 586-591.

F. Boas. Tsimshian Texts. Bulletin 27, Bureau of American Ethnology. Washington. 1902.

A. C. Graf von der Schulenburg. Die Sprache der Zimshian-Indianer. Brunswick, 1894.

tinuatives, frequentatives, completives. Related in form to these temporal and local suffixes are a number of modal suffixes expressing ideas like early in the morning, by sea, here and there, potentiality. It is somewhat difficult to draw the line between these suffixes and a few others which determine the syntactic function of the verb, as imperative, interrogative, negative, etc. While in form they seem to be the same as the adverbial suffixes, their sense implies that they serve a syntactic function. It may also be mentioned that Haida has a few suffixes to indicate the social relation of the speaker and the person addressed. As, for instance, a suffix indicating that the speaker addresses a person of lower rank.

There are very few suffixes in Haida by means of which nouns can be formed from verbs.

It is important to note that in many cases nouns may be used in the same position which is occupied by the two important groups of prefixes, namely, instrumentals and classifiers.

In the pronouns, two sets of forms must be distinguished, the active, and the neutral or objective. These forms differ in the first and second persons singular and in the first person plural. In the third person singular a definite and indefinite singular may be distinguished. A similar distinction may be made in the plural. These pronouns do not firmly coalesce with the verb. In the transitive verb the object always precedes the subject, although in cases in which nouns accompany the verb, the subject precedes the object, probably because the object forms a firm unit with the verb. The possessive pronoun is closely related to the objective pronoun.

The idea of plurality is not strongly developed. In most cases nouns do not change their form, while those indicating relationship, and a few others take plural suffixes. Other words expressing human beings also take a plural suffix. In other cases, plurality is expressed by means of indefinite pronouns. In the verb, a double suffix may be used for expressing repetition, and the idea of collectivity is expressed by a classifying prefix. Adjectives expressing shape and size also take a peculiar plural suffix.

In the sentence the verb almost always stands at the end. Adjectives and possessives always follow the nouns they refer to.\*

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\*F. Boas in Report of the 58th Meeting of the British Association for the Advancement of Science, 1888, pp. 868-878.

John R. Swanton. Notes on the Haida Language. American Anthropologist, N.S., Vol. IV., 1902, pp. 392-403.

John R. Swanton. Haida Texts and Myths. Bulletin 29. Bureau of American Ethnology. Washington, 1905.

A Translation of the papers by F. Boas, full of misprints, and reprints from a few gospel translations with faulty interlinear translations, were published by Raoul de la Grasserie, Cinq Langues de la Colombie Britannique; Haida, Tshimshian, Kwagiutl, Nootka et Tlinkit. Paris, 1902. The book is from beginning to end an appropriation of material from English sources. M. de la Grasserie himself has not contributed anything to what was previously known about these languages.



## IV. ETHNOGRAPHIC.

## 1. THE ESKIMO.

BY FRANZ BOAS.

The Eskimo inhabit the whole coast of Arctic America, extending on the east to Greenland, and westward to the East Cape of Asia. Their southern limits are near the Gulf of St. Lawrence, the extreme southern part of Hudson Bay and southeast of the Peninsula of Alaska. They are essentially a litoral people, living primarily on sea-mammals. In some regions fishing supplies an important part of their sustenance. Caribou and polar-bear and, where it occurs, musk-ox are hunted both for their meat and for their skins, which are used for clothing. The vegetable diet used by the Eskimo is insignificant, consisting only of the few berries that ripen in the Arctic.

The villages of the Eskimo are located in those places where the pursuit of sea mammals is productive, and for this reason their villages change somewhat with the seasons; but, on the whole, the same community shifts from one definite location to another, according to the season. They are not migratory in the sense that their villages are located sometimes in one part of a large territory, sometimes in other regions. In summer the animals hunted are primarily various kinds of seal, walrus, white whale, narwal, and the whale. Late in summer is the season for the summer hunt of the reindeer and musk-ox. In the fall the pursuit of the sea-mammals is continued until the sea is covered with ice. In those regions where open water is found in winter not far from the villages, such sea-mammals as frequent the edge of the land-floe are hunted. In other regions, where the winter village is located on the coast, far away from open water, the Eskimos live on the common seal, which has breathing-holes that are kept open throughout the winter.

The material for clothing, for household utensils, and for building, is obtained almost entirely from the animals hunted, and of a few kinds of rock easily worked. Wood is so scarce that very little of it is used, except in those regions where drift-wood is plentiful.

The economic conditions of life are practically the same all along the Arctic coast. The only regions where certain differences are found are the extreme southern parts of Labrador and Alaska, where the forests approach the coast inhabited by the Eskimo, and the interior of the region northwest of Hudson Bay, where the Eskimo live on large lakes and rivers.

Partly owing to the uniformity of geographical surroundings, the occupations of the Eskimo are very uniform in the whole district inhabited by them. A considerable degree of differentiation of culture is found in the region west of the Mackenzie River, where they seem to be influenced by the neighboring Indian tribes, and in the extreme west, where they are also influenced by the Chukchee of Northeastern Siberia. Notwithstanding these differences, the Eskimo appear as exceedingly conservative in preserving their cultural possessions. This phenomenon may be observed as well in the remarkable uniformity of the Eskimo dialects from Greenland to Alaska, as in the similarity of the material possessions and in the uniformity of their folk-lore. It was stated before (p. 79) that there is evidence that the Eskimo west

of the Mackenzie River are not of pure Eskimo descent, but probably mixed with Indian elements.

The inventions of the Eskimo used in the pursuit of sea-mammals are remarkably ingenious. The animals are killed by means of harpoons. In regions where wood is not available, the harpoon-shaft often consists of bone or of narwal tusk. To this is attached a moveable fore-shaft, connected with the shaft by means of thongs. The attachment of the foreshaft to the shaft is such that when there is no lateral pressure, the shaft and foreshaft form a straight line, but as soon as there is a strong lateral pressure, the foreshaft turns over and disengages the harpoon point, which is placed at the extreme end of the foreshaft. The detailed arrangement of these harpoons differs with different regions. The harpoon used in winter in hunting on the ice has no moveable foreshaft, but the harpoon point alone is detachable. Harpoons that are used in hunting animals which swim about in open water are provided with bladders intended to keep the shaft afloat. These floats are either tied firmly to the shaft, or, in other cases, they are attached to the harpoon line, preventing in this way the sinking of the animal after it has been killed. While the harpoon is primarily used for securing the game, the lance is used for dispatching the harpooned animal. The lance generally consists of a shaft with movable foreshaft attached in the same manner as that of the harpoon, but provided with a cutting edge. In some cases, the shaft is provided with a socket, into which lance-points may be inserted, which, after stabbing the animal, remain in the body. For hunting larger game in open water, drags are attached to the harpoon line, which hinder the movements of the wounded animal.

For the pursuit of the game in open water a peculiar hunting-canoe is used, called the kayak. It consists of a light framework made of wood, whalebone, or bone, over which is stretched a skin cover. The details of the form show considerable variation in various regions, but all kayaks are built on the same fundamental plan, the whole frame being enclosed with skin, leaving open only a central hole in which the hunter sits. In regions where very light kayaks are used the hunter wears a water-tight garment, which is fastened around the kayak hole, so that no water can enter the hold. In regions where larger kayaks are used, this is not the case. The kayak is propelled by a double-bladed paddle. The harpoon and lines are placed in front of the hunter on the deck of the kayak, while the drags and floats attached to the harpoon-line are placed aft. The quarry is tied on the deck of the kayak aft. Whale-hunters and travellers use the large so-called "woman's boat," a flat-bottomed structure having a framework made of wood and covered with the thick hide of large seals or walruses. The woman's boat is propelled by oars, which are held in place by means of oar-locks. Sails made of intestines are also used, and allow the boat to sail before the wind. Its course is directed by a large steering paddle.

Fish are caught with nets and hooks; salmon with three-pointed fish-spears. Birds are caught with nets and with the bird-spear, which is provided with lateral prongs, and is cast by means of a throwing-board; waterfowl are caught with snares made of whalebone. For hunting large game like caribou and musk-ox, the bow and arrow are used. The brittle driftwood cannot be utilized for making elastic bows; and elasticity is secured by an ingenious backing



with twisted sinews, taken either from the caribou or from the white whale. The arrows have wooden shafts and foreshafts made of bone. Caribou are often driven into the water and then hunted from the kayak by means of lances.

The habitations of the Eskimo are well adapted for protection against the inclemencies of the Arctic climate. Two types of winter-houses are found, a semi-subterranean structure, the sides of which are built of stone and supported by whalebone. The roof of the structure is formed of poles or bones, over which is stretched a cover of skin. The skin-covering is protected by a layer of small shrubs or similar material, which, in turn, are covered by a second skin-cover which is weighted down with stone. The entrance to this dwelling is generally a subterranean passage covered with flat slabs of stone and soil, and sloping slightly upward so as to prevent the cold air from entering the living room. Large dwellings of this type are found in Greenland, while the dwellings in the central regions are generally small. The second type of winter house is built of snow, in form of a vault. Blocks of snow are cut out with ivory or bone snow-knives, and are built up into a vault by means of a spiral construction, every newly added block of snow resting on the lower course of the spiral and on the last preceding block. In a few regions, stone houses built on a similar principle are used. The invention of these vaulted structures may be considered one of the most remarkable achievements of the Eskimo. Generally, the rear part of the house is occupied by the bed, which is covered with shrubs and caribou skins, while to the right and left the lamps and kettles are found, which are used for heating the houses and for cooking. Attached to the snow-house there are generally a number of storerooms in which provisions are kept. In summer the people live in tents made of skins. In northern Greenland these tents consist simply of a few poles of wood or bone, each being often spliced together of short pieces, over which sealskins are thrown. In other regions, the tent is more carefully constructed, being similar in plan to the winter-house. A semi-circular rear portion is set off from a longer entrance. The rear portion contains the bed, while the entrance, which is covered with the transparent inner layer of seal-skin, admits light and is used as a store-room. In the southern parts of the west coast of Hudson Bay conical tents with a framework of converging poles are used. Farther north the tent is supported by a single pole over which a stout thong is stretched. In summer the cooking is done outside of the tent over an open fire.

The most important part of the household belongings of the winter-house is the lamp. This is made of soapstone, and is a flat crescent-shaped dish. A wick made of moss or from vegetable fibre is spread along the straight front edge, while the bowl of the lamp is filled with seal-blubber which sustains the light. When cooking has to be done, the kettle, also made of soapstone, is hung over the wick. When not in use it is pushed back. Over the lamp is a frame used for drying clothing. On account of the importance of soapstone for the manufacture of kettles and lamps, the Eskimo make long trading-trips from regions where no soapstone occurs to those where this material is found, the distance covered being sometimes as much as a thousand miles. Similar trading-trips are made for driftwood. On Southampton Island, a large island in Hudson Bay, where no soapstone occurs, lamps and kettles of the same type as those used else-



where are made of thin slabs of limestone, which are sewed together and caulked by means of a mixture of blood and soot. Dishes are made of skin and whalebone. In those regions where wood is available, they are bent of pieces of wood made pliable by steaming.

Among the tools of the Eskimo may be mentioned the drill, originally a piece of flint or other stone, inserted in a long bone handle. The drill is set in motion by means of a bow, generally made of the rib of a seal. The string of this bow is a thong and is quite loose. It is twisted once around the drill. The butt-end of the drill is placed against a mouthpiece, and the drill is rotated by rapid motion of the bow. Knives were generally made of flint and similar material. In Arctic Greenland, where meteoric iron is found, knives were also made of small bits of iron. Flints and pieces of iron were inserted in the cutting edge, and in this way a long saw-like edge was secured. It is remarkable that in cutting off pieces of bone, the Eskimos did not ordinarily use a stone saw, but preferred to make drill-holes close together and then to wedge the bone apart. For arrowheads and lanceheads, points made of flint and of slate were used. Women's knives, used in the preparation of skins, and in sewing garments, were made of slate or similar material, and were similar in form to our butcher-knives. The typical knife of the men was double-edged.

Of greatest importance in the domestic economy of the Eskimo is the dog, which is used for hunting as well as for drawing sledges. The distances that must be covered by the hunter every day are considerable, and the daily trip from the home to the hunting-ground is generally made by dog-sleds. The long and frequent travels of the Eskimo families from one winter village to another, for purposes of trade, or for visits, are also made by dog-sleds. East of the Mackenzie River the sled has two low solid runners of wood or bone, connected by cross-bars, and generally a high back is used for steering. The dogs are harnessed by means of long lines and are attached to a stout thong, so that, when running, they are arranged fan-like. One dog has a longer line and serves as leader of the team. The driver generally sits on the sled and directs the dogs by means of calls and of a long-lashed short-handled whip. The domestication of the dogs is very imperfect. They are badly fed and allowed to run wild in summer when they are generally placed on an island where they have to find their own food. The dog resembles the Arctic gray wolf, with which it frequently intercrosses.

The caribou is nowhere domesticated in America. Clothing is made of furs. In most regions sealskin is worn in summer, caribou skin in winter; but there is considerable differentiation in the style of clothing. Both sexes wear long stockings and boots, trousers, and a short jacket provided with a hood. All these garments are double. The inner one is worn with the fur side to the skin, the outer one with the fur side out. The jacket of the married women has a very large hood which extends far down the back. A belt is attached around the jacket under this hood, which serves for carrying the infant, the infant being put into the hood on the back of the mother. The arrangement of different colored skin in the garments follows a definite style and differs somewhat in the two sexes. In Greenland clothing is generally ornamented with dyed skins from which the hair has been removed. Almost everywhere the jacket is provided with a short tail

in front and another one behind. These tails are generally longer in women's garments than in men's. In Labrador and Baffin's Land the tails of the women's garments reach an extraordinary size, reaching down to the ground. On the west coast of Hudson Bay a most remarkable development of the stocking is found, which practically supplants the women's trousers. These stockings are extraordinarily wide, forming enormous pouches above and below the knee. Similar pouches are found in the sleeves of the jackets of this region. The ornamentation of the garments seems to emphasize, on the whole, the form of the body. We find very often that the shoulder-blades and the breastbone are indicated by skin of lighter color.

The preparation of the skins is in most regions the work of the women, although in a few cases the men do this work. The skins are carefully cleaned and subjected to various kinds of treatment, according to their use. Watertight hides are prepared for kayak covers and for boot-soles, while skin that is to be used for clothing is carefully treated so as to be as soft as possible and to hold the hair.

On the whole, the decorative art of the Eskimo is not remarkably developed. The fairly rich ornamentation found in Alaska is probably partly due to foreign influences. The same may be true of the decorative art of Greenland. In the central regions, practically all utensils are of rude form, and there are very slight indications of any tendency to decorate the objects of daily use. Where such decoration occurs it generally consists of a series of dots and lines in ivory, which are filled with black. These dots are arranged in geometrical lines; they sometimes represent human or animal figures. Old specimens from this area show, that the elements of decorative geometrical designs in Alaska and in the Hudson Bay region were of the same character. On the other hand, the Eskimo have a well-developed plastic art. They are fond of carving in ivory and make a great many good realistic carvings, which, however, on the whole, do not serve any practical end. Most of such carvings are toys, or are made for the pleasure of the work. Handles of quivers, toggles and similar objects, which lend themselves readily to realistic representations, are carved in this manner. The lack of decorative art is, therefore, not due to a lack of artistic sense on the part of the Eskimo.

The social organization of the Eskimo is very simple. The social unit is the family, which is reckoned in both paternal and material line. The household—consisting of father and mother, children, and sometimes a brother and widowed relatives—forms the social unit. In many cases, the children after marriage continue to form part of the household. There is no strict rule of residence, the husband sometimes residing with his wife's parents, and the wife sometimes moving to her husband's house. The various households which live in the same locality do not form a strict political or social unit. Their union is temporary and may be dissolved at any moment. It is clear that under these conditions no well-developed chieftaincy can exist. In some regions the experienced hunter who knows the movements of the game well, and who by his advice can guide the men of his village, may attain a certain degree of authority. This is particularly true in cases where in pursuit of game the tribe makes habitually long trips every year. Such is the case, for instance, in regions where the people hunt seals in winter on the sea-ice, while they spend the summer a long distance from their winter hunting-



grounds in the interior of the country. Nowhere, however, do we find chiefs who exert strict authority over their tribes. Owing to intermarriages, distant relatives and friends are often scattered over a vast territory. This leads to frequent visits and the temporary residence of a family in various parts of the country. The distances covered in such migrations are remarkable, and cases are known of families that have resided at one time on the shores of Hudson Bay, while at other times they were found on the shores of Smith Sound.

Notwithstanding the looseness of the village unit, there is a certain sense of unity of tribal organization which manifests itself particularly in the distrust of strangers. It seems that in olden times, among all Eskimo tribes, certain ceremonial forms of meeting strangers were in use. In the central regions these generally consisted in a formal contest, which sometimes ended in the death of one of the contestants, but it generally had a more harmless character and merely preceded the hospitable reception of the stranger. These contests consisted in wrestling matches or in trials of endurance.

Although there is no definite form of government in the village community, the men, at certain times, act in the capacity of an informal council. Thus, if a man has made himself obnoxious, the men of the village may consult, and agree on the desirability of ridding the community of that particular person. After this, any man has the right to kill the disturber of the peace without fear of blood revenge.

Both polygamy and polyandry occur among the Eskimo. A man may marry several sisters, and where women are few in number, families are found consisting of several brothers and of unrelated men who are married to one woman. Scarcity of women is largely due to the custom of infanticide, female children being often considered as a burden and being killed shortly after birth. Where this custom does not prevail, the dangers that beset the life of the hunter are liable to bring about a preponderance of women in the tribe, which leads to greater frequency of polygamy. It is interesting to note that among the Eskimo cases of men remaining bachelors are not by any means infrequent. Old people are generally treated with respect, but in cases of famine they are often left to die, and when they feel themselves an incumbrance on the tribe they may even seek death by suicide.

The religious views and practices of the Eskimo while, on the whole, alike in their fundamental traits, show a considerable amount of differentiation in the extreme east and in the extreme west. It would seem that the characteristic traits of shamanism are common to all the Eskimo tribes. The shaman is called by the Eskimo *angakok*. The art of the *angakok* is acquired by the acquisition of guardian spirits. In some regions the belief prevails that the ability to acquire a guardian spirit must be transmitted by the teaching or by the direct influence of a shaman. Thus, the Greenland Eskimo believe that a child that is kept on the knees of a shaman will itself in course of time become a powerful shaman. In the region of Hudson Bay and Baffin's Land, no such transmission of power seems to be believed in, but it is stated that the shaman suddenly feels a supernatural light surrounding his body. His eyes acquire the power to see supernatural objects that are invisible to ordinary mortals, and by the help of his guardian spirits he acquires the power to cure diseases and to visit the world in which the supernatural beings reside.



The statements made by various authorities in regard to this subject are not quite consistent, and it seems probable that the ideas held by the Eskimo show a considerable degree of variation. It might seem that in some cases the initiation of the shaman consists only in his subjective feeling of the acquisition of supernatural power without the revelation of an individual guardian spirit; while in other cases it would appear that supernatural power is acquired by an encounter with such a spirit. Many different kinds of beings may become the guardian spirits of men, but prominent among these are polar bears and other animals.

Besides the spirits which may become guardian spirits of men, the Eskimo believe in a great many others which are hostile and whose visits bring disaster and death. These hostile spirits are not animals or human beings, but have fantastic forms, believed to be endowed with life.

Powerful shamans are believed to be able to change their sex, to take off the skin from their face in order to frighten to death their enemies. Their souls are believed to be able to leave the body. They can see the spirits that haunt the villages and can discover the transgressions of taboos, which are the cause of misfortune and starvation.

Before describing their practices it is necessary to describe briefly the beliefs of the Eskimo regarding taboos and transgressions of taboos. Restrictions in regard to food and in regard to work are very numerous. It is forbidden to bring sea-animals, particularly seals, ground-seals, and whales, into contact with caribou. It is forbidden to do certain kinds of work after a seal has been killed and after a death has occurred. A person who has touched a dead body must not touch any kind of game. No work on deer-skin is allowed until sea-ice has formed, etc. Restrictions like these are found among all primitive tribes, but the interpretation of these customs among the Eskimo is peculiar. It is believed, for instance, that a person who has touched a dead body or anything that has been in contact with a dead body, is surrounded by a black halo, which is distasteful to the game-animals, and that if a person thus affected goes hunting the animals will keep away. Furthermore, if an animal should be killed by a person who has transgressed one of the taboos, the transgression of the taboo, which is considered a material object, is believed to become attached to the soul of the animal, which takes the transgression of the taboo along to the deity that has control over the animals. It is believed that the transgression of the taboo hurts the deity, and for that reason she visits the tribe with misfortune.

Since it is thus necessary to avoid all contact with the transgressor of a taboo, for the reason that by contact with him the material transgression of the taboo may be transmitted to another person, the Eskimo requires that every transgression of a taboo be publicly confessed, in order to enable others to keep away from the transgressor, and for this reason the transgression of the taboo is not so much considered a sin as the concealment of such a transgression. From this point of view the idea has developed that confession is sufficient to atone for the transgression of the taboo, and this confession, although it may often be compelled through relatives of the offender, is generally secured through the shaman.\*

\*Compare, pp. 200 and 201.

It is therefore one of the important functions of the shaman to discover the offences which give rise to misfortune and starvation. Two principal methods are used for this purpose: the lifting of stones, or of the head of a patient by means of attached thongs, the theory being that when a question is asked and the shaman is able to lift the stone or the head, the reply is negative, while when he is unable to lift them the reply is positive. The second method is the visit of the shaman to the deity that has control over the destinies of mankind, and which controls the supply of game. It is supposed that on these visits the shaman sees the transgressions that have caused the misfortune. The shaman may also discover the material transgressions which are attached to the body of a sick person, and he may cure him by cutting off these transgressions.

Different from the art of shamanism is witchcraft, which consists in the use of parts of corpses or of other objects for purposes of sympathetic magic.

These peculiar forms of belief are most fully developed among the central Eskimo, but an analysis of the traditions and customs of Greenland suggests that similar ideas were originally held among all the Eskimo tribes.

The ritualistic development of Eskimo religion is very slight. There are only a very few instances where members of the village join in religious rituals. In former times each village had an assembly house, which was devoted to the celebration of festivals, most of which had a semi-religious character without, however, being sufficiently formal to deserve the term of religious performances. In these assembly houses, singing contests were held and many of the shamanistic practices were performed there. The central Eskimo tribes, however, have at least one important annual festival, which has a direct relation to their belief in a deity protecting the sea-mammals. It is believed that every fall, when the ice forms, this deity visits the villages. Then a ritual is performed, the essential object of which seems to be the home sending of the deity and the attempt of the shaman to rid her of all the transgressions that are attached to her body and that give her pain. The forms in which his celebration is performed are not the same everywhere, but in many cases the ritual is characterized by a definite series of rites and by the appearance of certain masked figures, who represent assistants of the deity or other spirits. One of the features of this rite is the temporary exchange of wives, which is believed to be one of the means of appeasing the wrath of the deity.

West of the Mackenzie River the series of the rituals is very much more complex, and in the more southern regions the number of masks used is quite considerable. Judging from the types of the masks and the description of the festivals it seems, however, likely that these are to a great extent influenced by Indian customs.

Some older accounts of the central Eskimo suggest that other rituals were performed after the capture of whales. The people assembled in open stone enclosures, built for this purpose and performed a ceremonial of thanksgiving.

The mythological concepts of the Eskimo are remarkably meagre and unsystematic. They seem to be most fully developed in the central regions, where the most important myths centre around the deity who is the mistress of sea-mammals. According to tradition, she is a girl who was given in marriage to a bird. When the bird



maltreated her she tried to escape with her father, who had come to visit her. The birds raised a storm, which threatened to swamp the boat in which she was fleeing. Then her father cast her overboard, and when she clung to the gunwale, he cut off the joints of her fingers one after the other. The first joints were transformed into whales, the second joints into seals, the third into ground seals. She became the mistress of the under-world and controls the animals which originated from her fingers. It is believed that the souls of those who die a natural death go to her abode.

There is a considerable variety of beliefs in relation to the fate of the soul after death. The soul of those who die a violent death go to heaven, where they play ball with a walrus head, thus causing the northern lights. But other places are believed in, and in some regions a number of upper worlds and a number of lower worlds are believed to exist, each of which is the home of a particular group of souls.

Sun and moon are believed to be sister and brother, the brother being constantly in pursuit of his sister; although in other traditions, sun and moon are described as residing in one house in heaven.

Setting aside these traditions and a few animal tales, the Eskimo have practically no creation legends. According to their ideas the world has always been what it is now. Rain, thunder and lightning are believed to be produced by a few women, who escaped from human society and to live by themselves. It is believed that in the beginning of the world, children were found in the snow, but that through the action of two girls, the present state of affairs was introduced. The narwal is believed to be a transformed Eskimo woman, whose braid became the narwal's tusk. The walrus and the caribou were created from parts of a woman's clothing, which she had cast away. A woman running along the beach and bewailing the loss of her grandson was transformed into a bird. The transformations enumerated here and a few others are told in trifling stories, or are merely incidents in elaborate tales. They do not stand out primarily and prominently as myths accounting for the creation of these animals. In fact, it might seem that these animals are believed to have existed even before the event told in the tradition and that the creation is that of a particular individual of the species rather than that of the whole species.

The rest of the very rich folklore of the Eskimo is essentially human, and deals with the exploits of heroes, with the deeds of shamans, and with incidents that might happen at the present time in any Eskimo village. The belief in the supernatural, which is characteristic of the present Eskimo, enters, of course, almost into every one of these traditions; but, nevertheless, they reflect essentially the Eskimo life of the present day and do not belong to a mythological period, a feature which is characteristic of almost all Indian mythologies.

A comparison of the traditions of various Eskimo tribes is of great interest, because it proves the great conservatism of the people. Tales which are apparently so trifling that we might be inclined to consider them as having happened a short time ago and by chance retained in the memory of the people, are told in the same way in Labrador, in Baffin's Land, and in Greenland—regions, the inhabitants of which have not been in contact for hundreds of years. This proves that many traditions must have retained the same form for a considerable



period, and the phenomenon is quite in accord with the permanence of customs and of language referred to before.

In view of this fact, it is interesting to note that the few animal tales referred to above are not the exclusive property of the Eskimo, but belong to both Eskimo and Indian. Thus, the story of the origin of the narwal begins with an incident of a blind boy who is maltreated by his mother. In the course of events, he shoots a bear, his mother directing the aim of his arrow. Later on, his eyesight is restored by a goose, who dives with him in a pond. This portion of the tale is found among the British Columbia Indians, in the Mackenzie Basin, and among many eastern Eskimo tribes. The tale of a monster which steals bodies from graves and which finally is induced to carry away a person who pretends to be dead, is found spread over the same area. This distribution of the animal tales suggests that they are probably not part of the original Eskimo folklore, but were borrowed from the Indians, and later on became the common property of many of the Eskimo tribes. The area of distribution of these animal tales may be defined as extending from the mouth of the Columbia River on the Pacific coast, across the continent to the southern part of Hudson Bay; thus occupying the whole of Arctic America and the northwestern part of our continent.

The folklore of the Eskimo, west of the Mackenzie River, differs in many essential traits from that of the eastern Eskimo. It is much more complex, many of the elements of the folklore of the North Pacific coast being embodied in it. In this respect the folklore of the western Eskimo bears evidence of the mixture with Indian elements, which is suggested as well by the physical type of the people as by the peculiar foreign traits of their culture, all of which point to an extended influence of the Indian tribes located south of the Alaskan Eskimo.

While the traditions mentioned indicate a certain amount of borrowing from Indian sources, other traits suggest a diffusion of cultural elements across Behring Strait to northeastern Asia. Common to the Eskimo and to the Chuckchee is the human character of mythology. Among the Chuckchee hero tales are even more strongly developed than among the Eskimo. Many of the shamanistic practices of the Chuckchee and other tribes of Eastern Asia are remarkably similar to those of the Eskimo; thus, the custom of divination by means of head lifting and stone lifting is the common property of the Eskimo and of the Chuckchee and other tribes as far south as the Amur River region. Most of the traits in the material culture of the maritime Chuckchee are so much like the corresponding traits of Eskimo culture that both must evidently be considered as originating from the same sources. On the whole, it seems more likely that the Chuckchee have adopted Eskimo customs than that the reverse has taken place.\*

\*H. Rink. *Tales and Traditions of the Eskimo*. London, 1875.

F. Boas. *The Central Eskimo*. Sixth Annual Report, Bureau of Ethnology, pp. 399-669. Washington, 1888.

— The Eskimo of Baffin Land and Hudson Bay. *Bull. American Museum of Natural History*. Vol. XV., 1901, 1906.

W. J. Hoffman. *The Graphic Art of the Eskimo*. Report U. S. National Museum for 1895, pp. 739-968. Washington, 1897.

A. L. Kroeber. *The Eskimo of Smith Land*. *Bull. American Museum of Natural History*, Vol. XII.

## 2. THE BEOTHUKS OF NEWFOUNDLAND.

BY ALEXANDER F. CHAMBERLAIN.

*Habitat, name, etc.* The Beothuks, or "Red Indians," of Newfoundland, are now extinct, their last representative, Shanandithit, one of three women taken by the whites in 1823, having died at St. John's in 1829. The suggestion has been made that a few individuals may, at various times, have escaped to the Labrador coast, where they mingled with the Algonquian Indians of that region (Nascapies, Montagnais, etc.), but no evidence of this is forthcoming. Whether they ever inhabited the whole island is doubtful; their characteristic area, after the intrusion of the whites, was the country inland from the Bay of Exploits along the river of the same name, and about Red Indian Lake, which received its appellation from them. In summer they moved around among the islands and on the coast from Cape Freels to Cape John (formerly much further). Among the localities where remains of the Beothuks, or traces of their former presence, have been discovered are Red Indian Lake, Pilley's Island (in an arm of Notre Dame Bay), Rencontre Island of the lower Burgeo group, Bonavista Bay, Birchy Lake, Long Island in Placentia Bay, Fox Island, Trinity Bay, Funk Island, Twillingate Island, White Bay, Hare Bay, Bonne Bay, Flat Bay, St. George's Bay, Codroy River. This embraces the greater part of the coast-line of the island and leads to the belief, that these Indians were acquainted with, or dwelt upon, most of the sea-coast, while a considerable portion of the interior was at one time or another occupied by them.

Of the name Beothuk, Beothik, or Beothick, no satisfactory explanation has been given,—it is probably a word for "Indian, man," or some tribal designation. The appellation "Red Indians" is said to have been given to them by the Europeans on account of their custom of "painting" their faces and other parts of their bodies with red ochre, which they also applied to some of their utensils. According to Patterson, however, this name antedates the coming of the whites, and is simply a translation of the Micmac *Maquajik*, "red people." Rand, in his Micmac dictionary gives *Megwajijik* as the name of "the Red Indians of Newfoundland."

*Relations with other peoples.* Whether the Micmacs (whom the Beothuks called *Shawnak*) had relations with the Beothuks in "pre-historic" times is uncertain, but by the beginning of the eighteenth century they had their colonies in the western part of Newfoundland and began a war of extermination against the Beothuks, in which they were aided and abetted by the French, who, from 1660 onwards, had established themselves at Placentia and elsewhere on the southern coast, and afterwards by the English fishermen and colonists. The possession of firearms by the Micmacs gave them a decided advantage over the Beothuks, who were soon driven away from the Micmac portion of the country with severe losses. They continued

L. M. Turner. Ethnology of the Ungava District. Eleventh Annual Report, Bureau of Ethnology, pp 159-350. Washington, 1894

John Murdoch. Ethnological Results of the Point Barrow Expedition. Ninth Annual Report, Bureau of Ethnology, pp. 1-441. Washington, 1892.

E. W. Nelson. The Eskimo about Bering Strait. Eighteenth Annual Report Bureau of Ethnology, pp. 1-518. Washington, 1899.



mortal enemies to the last. With the Eskimo, who visited Newfoundland by way of the straits of Belle Isle, the Beothuks are said to have been on hostile terms. They called them "dirty." The Beothuks seem not to have been the equals of the Eskimo in conflicts on the water. The Indians (Algonquian) of the coast of Labrador, known to the Beothuks as *Shanwomunk* were friendly, and carried on trade and barter with them, and *vice versa*, such visits being attended with quite friendly relations.

The extermination of the Beothuks by the Micmacs and the whites is a dark chapter in the history of Newfoundland, and a blot upon European civilization. They were shot like deer or partridges, the hunters boasting how many "head of Indian" they had killed. Men, women and children all suffered. Of those captured many were, according to Cartwright, "exposed as curiosities to the rabble at the fairs of the western towns of Christian England at two pence a piece." Several Beothuks were brought to England by Cabot in 1497, and quite a number were sent as slaves to Lisbon, as a result of the expedition of Cortereal in 1501. During the sixteenth century brief notices of the Beothuks (though not by this name) are given by Cartier (1534), Hore (1536), Frobisher (1574), and Hayes (1583), the last reporting that there were no natives on the south coast, "but in the north are savages, altogether harmless." The attempts at colonization by the English under Guy in 1610, at Mosquito Harbor (Conception Bay), seem not to have led to disturbances with the Beothuks, whose intercourse with the whites was quite friendly. Whitbourne, in 1615, represents them as "living altogether in the north and west part of the country, which is seldom frequented by the English," and having a good reputation with the French and Biscayan whalers. Baron de Lahontan (at one time governor of Placentia, when held by the French) knew so little about the Beothuks, that he could say in 1690, "there are no settled savages on the island,"—so far into the interior had they retreated even at this time (probably into the country about the River of Exploits). Cartwright, in 1768, says that the conduct of the English fishers towards the Beothuks is "an inhumanity that sinks them far below the level of savages." In 1760 the Government, under Capt Palliser, issued the first official document in favor of the natives, and during the next few years several expeditions (including that of Cartwright in 1768) were sent out to discover and treat with the Indians, which were more successful in obtaining ethnological information than in inducing the Beothuks to trust the English settlers. A few individuals were captured, but that was about all. The efforts of Govs. Gambier in 1802, Holloway in 1807-1809, Duckworth in 1810-1811 (the Buchan Expedition) were hardly more successful. After this the relations between the settlers and fishermen of the north of the island and the Beothuks continued to be hostile. A few natives were occasionally carried off to the white settlements, as was the case with Demasduit, or "Mary March," in 1819, Shanandithit in 1823, etc. In 1827 there was organized in St. John's the "Beothic Institute," which sent out, under Mr. Cormack, an expedition into the Beothuk country, but neither they nor any subsequent explorers ever found a living representative of the tribe.

*Physical characters.* Dr. Brinton, in his *American Race* (p. 67) describes the Beothuks as of "medium stature," but the tradition of



the English in Newfoundland is that they were tall. De Laet, indeed, does speak of them as "of medium stature,"; but Howley says that "they were of middle stature, say five feet, ten inches," a height which would bring them into Deniker's "high statures." The husband of "Mary March" is said to have been 6 ft., 7½ in. tall, and the woman Shanandithit is described by Rev. Mr. Wilson as "a tall, fine figure, nearly six feet high." The Micmacs and whites, doubtless, exaggerated the stature of the Beothuks, but the latter may be considered to have been a "rather tall people." The individual brought to England by Cabot, when properly apparreled, "looked like Englishmen," according to the chronicler of the time; and all narrators agree that they were not ill-formed physically,—Howley, indeed, says: "The Beothuks were a much finer and handsomer race than the Micmacs, having more regular features and aquiline noses, nor were they so dark in the skin." Reference is frequently made to their black and piercing eyes, very black hair, fine teeth, etc. All observers distinguish them in physical features from the Eskimo more even than from the Micmacs. The few skulls of Beothuks that have been examined show a good development of the frontal region with prominent nasal spine and absence of depression at the root of the nose. The cheek-bones of "Mary March" were rather high. Her hands and feet were "very small" and limbs "small and very delicate," particularly her arms, and she was very proud of this. Her complexion became lighter after washing, and freedom from the smoke of the wigwam. The Beothuks are said to have been "active and athletic."

*Temperament, etc.* The earlier accounts speak of the Beothuks as harmless savages," "ingenious and tractable people," of a certain mild and gentle disposition, except, of course, when imposed upon, deceived or attacked. Such acts of reprisal as are attributed to them after experience with the whites were but natural under the circumstances, and do not indicate particular savagery or cruelty of a notable sort. Those who had to do with "Mary March" were impressed by "her modesty and propriety of behavior, her gentleness and kindness, her gratitude for favors and her affection for her kindred." A woman captured in 1803 "showed a passionate fondness for children." Shanandithit was "bland, affable and affectionate." Several instances of the child-like character of these aborigines are on record.

*Intellect, senses, etc.* Father Pasqualigo, who saw in Lisbon the Beothuks brought over by the Cortereal expedition of 1501, wrote of them as "admirably calculated for labor, and the best slaves I have ever seen." Whitbourne (1615) reports them as ready to assist the French and Biscayan whalers, "with great labor and patience." Their quickness of intelligence is noted by many observers, both as to particular individuals resident among the whites, and as a general fact for the tribe. Of a Beothuk boy, living with the whites in the time of Cartwright, we are told that "he became expert in all the branches of the Newfoundland business." Demasduit, or "Mary March," possessed "quickness of observation, reading of character and power of imitation." Shanandithit had considerable talent in drawing with paper and pencil,—of her it is related that, "in one flourish she drew a deer perfectly, and, what is more surprising, she began at the tip of the tail." She also made some sketches indicating the events of the Buchan expedition (1810), which are said to be "quite accurate" in many particulars.

*Occupations, industries, arts, etc.* The Beothuks were notably hunters and fishers. Their country in Newfoundland abounded in deer, and they hunted also the bear, the fox, the otter, the hare, the seal, etc., besides land and sea fowl. They also took many salmon for food. Their bows had arrows sometimes three feet long, and they are said to have been excellent archers. Spears eight feet in length have been found in the Beothuk settlements. Flint and bone arrow and spear heads, and other stone implements were common,—some of the arrow-heads are very beautifully formed. In the kitchen-middens on the coast (e.g., at Long Island, Placentia Bay) arrows and spears heads and a considerable variety of stone implements (axes, chisels, gouges, scrapers, sinkers, rubbing and sharpening stones, etc.) have been found. Some also in graves antedating the coming of the whites. The Beothuks had a long-shafted retrieving spear or harpoon for killing seals, etc. But their most remarkable hunting invention was the “deer-fence.” The extent of these “fences” and “pounds” indicates a considerable degree of co-operation among these Indians, and accounts for the large amount of meat found in their deserted storehouses by the whites. They appear also to have made a sort of pemmican.

The houses of the Beothuks were generally lodges of poles, of peculiar construction. They had v-shaped hulls, high prows, and a marked central rise. They are said to have been skilful boatmen, exceeding the Micmacs in running rapids, etc. The Beothuk snowshoe was also peculiar, being rather like a tennis-racket in shape, longer and narrowing behind more than those of other tribes.

The houses of the Beothuks were generally lodges of poles, covered with skins or birch-bark, large enough to accommodate from six to twenty persons, each of whom had a hole (lined with moss or fir-boughs) around a central fire. They seem to have had both summer and winter “wigwams.” They also had square houses, which may have been imitated from the English; also large store-houses, “said to have been from 30 to 50 feet long, and nearly as wide.”

The art of pottery seems to have been unknown to the Beothuks, although suitable material was not absent; they made, however, pots and lamps of steatite worked *in situ*. Birch-bark vessels and utensils of various shapes and sizes were much used.

Among the ornaments known from the wearers or found in graves, etc., are bone, hair and dress ornaments figured in varied fashion, strings of small pieces of bone and ivory, pendants of ivory, shells strung together, small forked and pronged bone amulets intricately and ingeniously figured, etc. Many objects and implements were stained with red ochre,—this seems to have been a custom with some special significance. The skin dresses of the Beothuks were often well ornamented and there were special “dancing dresses” for the shamans.

*Health, disease.* It is recorded that all the Beothuk women who lived among the whites died of consumption, but how far this extended to their fellow tribesmen is not known. The Beothuks had the “sweat-bath” of the well-known Indian type, the sweat-house being constructed in the usual manner, and steam produced by pouring water on heated stones.

*Social and political organization.* Of the structure of Beothuk society very little is known. Something may be inferred from the



number of persons occupying a single lodge, but they were in all probability not communistic, nor polygamists, as a rule. Certain actions of "Mary March" suggested to some that she may have been the daughter of a chief,—the chief among the Beothuks was probably a man of considerable authority,—or perhaps herself a chief. Family affection and love for children is accorded them by all authorities, and it was marked in the case of captured women. The absence of such a domesticated animal as the dog (some observers say that they had half-tamed wolves) among the Beothuks may be of social importance. Likewise the fact that no agricultural processes were found among them (the climate was against this). They were probably quite a sociable people and had dances and like amusements. Culin, from consideration of some of the bone disks, thinks that the Beothuks "may have used gambling disks resembling those of the Micmac."

*Mythology, religion, etc.* Few of the religious and mythological ideas of the Beothuks have been recorded, although the vocabularies extant contain some words belonging in this category. Their term for "God" is given as *mandee*, which seems identical with Micmac *mundoo*, now signifying "devil." One of their names for "devil" was *ashmudyim*, which Shanandithit described as "an ugly black man," who was "short and stout, having long whiskers, dressed in beaver-skins, and sometimes seen at the east end of the lake." Some of these ideas are probably post-European, but the Beothuks probably had a manitou-idea similar to that of the Algonkians from whom the *mandee* may have been borrowed. One authority reports that these Indians believed that "they sprang from arrows stuck in the ground by the Good Spirit." Certain objects had perhaps some religious or symbolic meaning attached to them, e.g., some of the bone and ivory ornaments, or "amulets," the sticks with semi-circular head-pieces, the wooden images and dolls placed in the graves, etc.

The Beothuks had several modes of burial ("hut," scaffold, box, cairn), and deposited with the dead, food, utensils and implements, ornaments, etc. In one burial-place, e.g., were found small wooden images of a man and a woman, a doll (for a child), toy canoes, weapons, culinary utensils, etc. The grave of a boy contained, among other things, some smoked salmon in a bark-basket and several packages of dried trout. The burial-place of what was supposed to have been a "medicine man," yielded a medicine-bag and contents, several bird skulls, etc. The bodies of the dead were encased in the birch-bark, and, for some reason or other, became largely mummified, somewhat after the Alaskan fashion. The careful treatment of their dead may have had some religious import. Broken arrows were sometimes found in the graves.

*Language.* The linguistic material of the Beothuk consists of brief vocabularies obtained at various periods from captured women of the tribe, Owbeg, Demasduit, Shanandathit, the last recorded by Mr. Cormack in 1828, being thought the most reliable, although the woman had then been living some five years among the whites. The total number of words known is about 500. Dr. A. S. Gatschet, an expert linguist, who studied this material very carefully, concludes that the language of the Beothuks is "a separate linguistic family," altogether distinct from Eskimo and Algonkian in particular. There are phonetic, grammatical, and lexical reasons for this position. The Beothukan stock is included in the Powellian classification of



independent linguistic families of North America. Brinton thinks that in Beothuk may be detected "some words borrowed from the Algonkin, and slight coincidences with the Eskimo." He also ventures the opinion that "derivation was principally, if not exclusively by suffixes, and the general morphology seems somewhat more akin to Eskimo than Algonkian examples." The numerals, especially are un-Algonkian, also the names for parts of the body, etc., two test-series of words of great significance. It has been remarked that the words of these Beothuk vocabularies often seem to present a "disordered look," which is not unnatural considering the time and circumstances of their origin. It deserves notice also that they were all obtained from female members of the tribe, and it may just be possible that the language of the women differed in some way from that of the men (captured or foreign wives, e.g.), and we may have here something else than the real language of the Beothuks, or Shawantherot, as they are said to have called themselves.\*

### 3. INDIANS OF THE EASTERN PROVINCES OF CANADA.

BY ALEXANDER F. CHAMBERLAIN.

*Habitat, names, etc.* With the exception of the "Iroquois" (Mohawks) of the Lake of the Two Mountains, those (Mohawks) at Caughnawaga and St. Régis, and the "Hurons" of Lorette, near the city of Quebec, the Indians of the Eastern Provinces all belong to the Algonkian stock. These include, at present, the *Abenakis* of St. Francis and Bécancour, Que., numbering some 390; the *Amalecites*, *Milicites*, or *Maliseets*, of Témiscouata and Viger, Que., and Madawaska, etc., N.B., some 800; the *Micmacs* of Restigouche, Maria, and Gaspé, Que., some 700; *Micmacs* of New Brunswick, some 850; *Micmacs* of Nova Scotia and Cape Breton, some 2,000 (also a few in Newfoundland); *Micmacs* of Prince Edward Island, 290; *Montagnais* of the north shore of the upper St. Lawrence (Seven Islands), Betsiamits, etc.) and the region about the Saguenay and Lake St. John, in all about 1,800; *Nascapies*, or *Naskapi*, beyond the Montagnais and in the interior of Labrador, some 2,000, of which a considerable number are within the limits of the province of Quebec. Besides these there are the few *Nipissings*, or "Algonquins" of the Lake of the Two Mountains.

The Montagnais (*i.e.*, "Mountaineers"), so called from the fact that when first coming into contact with the whites, they occupied the rocky shores of the upper St. Lawrence and the region of the Laurentides, between the Gulf and Lake Mistassini, have roved over this country, contracting their range with the pressure of the whites, for centuries. Champlain met them on the St. Lawrence, between Quebec and the Saguenay, in 1607. With them belong the *Skoffies*, *Sheshatapoosh* (etymology?), "Shore Indians," etc. Behind them, roving between Lake Mistassini and the Atlantic and over a considerable

\*Geo. Patterson. Transactions of the Royal Society of Canada, 1891, II., Sect. II., pp. 123-171.

Geo. Patterson. Ibid., 1892, Sect. II., pp. 19-32.

A. S. Gatschet. See before, p. 91.

portion of the interior of Labrador, have been the Naskapi, or Nenenot (*i.e.*, "true, real men"), as they call themselves. According to Turner (1883) the term Naskapi is one of reproach conferred on them by their neighbors, the Montagnais. In part of the north region of the Lower St. Lawrence lived also the Skoffies, now extinct, who were very closely related in speech to the Montagnais. About the region of the St. Lawrence there formerly existed in large numbers (now reduced to very few) the so-called *Tête-de-Boule*, apparently closely affiliated with the Montagnais. The chief divisions of the Montagnais-Naskapi group at present are: Naskapi, Montagnais of Mistassini (the R.C. Mission is at Oka, on the shores of this lake), Montagnais of Lake St. John (the mission and Indian rendez-vous is at Pointe-Bleue—the Montagnais begin to go there at the end of June), Montagnais of the Saguenay (their earliest great rendez-vous was at Tadousac), Montagnais of Betsiamits (region about the river of this name, which enters the St. Lawrence below the Saguenay), Montagnais of the Seven Islands, etc. (near the mouth of the Moisie). The country over which the Montagnais and Naskapi still roam is a vast one, although the hunters and the seekers after game fish among the white men are more and more intruding upon it and narrowing the Indian limits. The Abenakis of St. Francis, etc., are, according to Professor Prince (1902) "the direct descendants (of course with some admixture of French and other blood) of the majority of the savages who escaped from the great battle of the Kennebec in Maine, where the English commander, Bradford, overthrew their tribe Dec. 2, 1679." Many of the survivors fled to Canada, settling at St. Francis, near Pierreville, Que., in 1680, whither others subsequently migrated. The Penobscot Indians of to-day "are the descendants of those of the early Abenakis, who, instead of fleeing to French dominions, eventually submitted themselves to the victorious English." The name *Abenaki* is a French corruption of the eastern Algonkian *Wonhbanaki*, *Wabanaki*, *Wapanakhi*, "Easterner," in reference, some hold, to the legendary origin of these tribes in the east. The Micmacs seem to have occupied at the period of their greatest extension the eastern half of New Brunswick (and part of north eastern Quebec, south of the St. Lawrence), all of Prince Edward Island, Nova Scotia and Cape Breton, and, more recently, part of Newfoundland. The Maliseet territory embraced (according to Ganong) all of the St. John's valley (except, perhaps, the mouth) and the valley of the St. Croix. There were two divisions, the "St. John's River Indians" (or Woolahstuk-wik), and the Passamaquoddies of the St. Croix basin—to the west lay the Penobscots about the river of that name. According to Rand (1875), the country of the Micmacs (Megumaage) was "divided into seven districts, each having its own chief, but the chief of Cape Breton was looked upon as head of the whole." These districts were Cape Breton, "at the head" of the wampum belt; Pictou, Memramcook, Restigouche, Eskegawaage (Canso to Halifax); Shubenacadie, Annapolis (to Yarmouth). Beyond these areas the Micmacs roved, of course, in their canoes, reaching the coast of Newfoundland, and proceeding at times for long distances up the river St. Lawrence, where they came into contact with the Montagnais, etc. The origin of the name *Micmac* is not known. The word *Maliseet* is said to mean "broken language,"—*Etchemins*, according to Gatschet (1897) is their Micmac name.



*Relations with other peoples.* As the vocabulary obtained by Jacques Cartier in 1534, and his further discoveries of 1535-1536 indicated, the banks of the St. Lawrence from Hochelaga (Montreal) to Stadacona (Quebec) were, at the beginning of the sixteenth century, occupied by peoples belonging to the Iroquoian stock, while the country about the Saguenay was held by Algonkian Indians, who also possessed the most of what is now the Maritime Provinces of Canada, and probably, likewise, some of the region to the south of the St. Lawrence in the eastern portion of the modern Province of Quebec. Between the advent of Cartier in 1534-5 and that of Champlain in 1608 (the specimen given by Massé in Champlain's *Voyages* (1632), is Montagnais), the "towns" of Stadacona and Hochelaga, together with all evidence of Iroquoian power in this region, had entirely disappeared. The country was roved over by a few Algonkian tribes, who made no very great impression on the European explorers. The Iroquoian peoples were found massed about the country to the south of the upper St. Lawrence and Lake Ontario, while a state of constant warfare existed between them and the neighboring Algonkian peoples in alliance with whom were the Hurons, a tribe of Iroquoian lineage, as evidenced by their language. The conflicts of the Micmacs and other allied tribes of Acadia with the Iroquois (Mohawks in particular) were very sanguinary, and the former often advanced far into the territory of the latter, as several place-names, besides traditions, demonstrate. In the harbor of Bic, on the south shore of the St. Lawrence, beyond the mouth of the Saguenay, lies an island called "L'Islet au Massacre," in memory, it is said, of the slaughter by the pursuing Iroquois of 300 Micmacs (men, women and children) in the time of the French-English wars, in which the Micmacs fought against the English (until 1760). This tale is, however, equalled by the tradition of the treacherous destruction of a party of Mohawks by the Abenakis on one of the islands below the mouth of the Keswick river, not far from Fredericton, N.B. The Mohawks, who are called in Micmac *Kwedech*, figure considerably under that name in Rand's *Legends of the Micmacs*, and other like works. The Mohawks made many raids in the St. John country, where the sites of battles are still pointed out by the Indians. In 1808 a council of whites and Indians (including Mohawks) was held at St. Andrews, N.B. Not infrequently the Micmacs and allied tribes made incursions into the country of the Iroquois. The Micmacs from Cape Breton and Nova Scotia, in alliance first with the French and then with the English, helped exterminate the Beothuks of Newfoundland, if, indeed, they had not begun the work before the arrival of the whites. The Micmacs had also some contact with the Algonkian Indians of the north shore of the St. Lawrence, and with the Eskimo in the Gulf. They have had feuds with the related tribes of Acadia in earlier days. Rand reports several traditions of wars with the Maliseets (Milicites), called *Kuhhu-soouk* ("muskrats") by the Micmac; they had also many disputes with the Passamaquoddies, including a "great war," which was finally ended by a permanent treaty of peace. Feuds were formerly numerous between the Maliseets and the Penobscots.

The Algonkian tribes of the north shore of the upper St. Lawrence and the adjacent interior Montagnais, Nascapies, etc., have had, as those nearest them have to-day, encounters with the Eskimo. Those of the past were very sanguinary. But the relations between



the Indians of the interior of Labrador and the Eskimo are (according to Turner in 1882-4) quite friendly, and some of the former are even parasitic on the latter, chiefly old men and women left behind in the hunting season. These impose on the good nature of the Eskimo. Considerable intermixture has taken place between the white settlers and the Indian tribes of the Eastern Provinces, some authorities going so far as to say that "among the Atlantic coast Algonkians no full bloods survive." The Montagnais, etc., have intermingled to some extent with the French Canadians, and Du Boscq de Beaumont (1902) noticed at Pointe-Bleue a number of halfbreeds, children of Montagnais mothers and Irish employees of the Hudson's Bay Company.

The intermixture of the Micmac and related tribes with the French, English and Scotch inhabitants of the Eastern Provinces has been of long continuance. In certain French parishes in New Brunswick, e.g., there is said to be hardly a pure-blooded white man or a pure-blooded Indian. The Indians of the Eastern Provinces found the French easier to get along with. According to Gabe Acquin, "Sachem of the Abenakis," who died in 1901: "The French lived among us, learned our language, and gave us religion; they were just like ourselves; that is why we thought so much of them." That there is justification for this belief is clear from the statement of Rand, who says that in 1846 "the power of caste and prejudice against the Indians was so strong in Nova Scotia that even such a good man as Isaac Chipman did not dare to allow me the use of an unfinished and unoccupied room in Acadia College, in which I could obtain lessons from one solitary Indian, for fear of affecting the prosperity of the college." Rand adds, with some exaggeration, that "of the present condition of the Indians of this province 80 per cent. of the improvement has taken place within the past 25 years."

The Abenakis of St. Francis have, of course, during their residence of more than two and a quarter centuries in Canada, absorbed a considerable amount of French blood, as have also the Hurons and Mohawks of the Province of Quebec.

*Physical characters.* The Naskapi, according to Turner (1883) are, both men and women, not quite so tall as the Indians of the southwest of Ungava. The Montagnais, according to Boas (1895) are considerably shorter than the Micmacs. They are also more brachycephalic (the average cephalic index of 79 individuals was 81.5; of these 16.5 per cent. were below 79 and 21.7 per cent. over 84). Of 220 Micmacs and Abenakis the average cephalic index was 79.8; below 79 there were 44.3 per cent., and over 84 only 7 per cent. The Micmacs and related tribes (the Eastern Algonkians generally) are rather tall. The average stature of 79 Micmacs and Abenakis (Boas) was 1717 mm. (5 ft. 7 in.), with 7.6 per cent. below 1660 mm. (5 ft.  $4\frac{3}{10}$  in.), and 45.7 per cent. above 1730 mm. (5 ft.  $7\frac{1}{4}$  in.). The average stature of the Micmac and Abenaki women was 1579 mm. for full-bloods, and 1577 mm. (5 ft.  $\frac{1}{10}$  in.) for half-bloods. The male half-bloods averaged 1727 mm. (5 ft.  $7\frac{3}{8}$  in., somewhat taller than the full-bloods. The half-bloods seem more variable than the full-bloods. In their earlier years the Indians are taller than the *métis*, but near puberty the latter catch up.

The tall stature and lower indices of the Micmacs and related tribes (taken in connection with the same phenomenon in the more ancient skulls from this area of North America), seem to justify, ac-

cording to Dr. Boas, belief in an admixture in times past of Eskimo (dolichocephalic) blood in the Indian tribes of New England and the Maritime Provinces, parts of Quebec, and even Ontario, a view supported by archæological evidence.

*Temperament, character, etc.* The general reputation of the Montagnais is stated by Turner (1883) to be "quiet and peaceable." The Naskapi seem to be "more demonstrative." They are said to ridicule men who allow their women to rule them, etc. "Either sex can endure being beaten, but not being laughed at; they rarely forgive a white man who laughs at their discomfiture." Of these Indians in general Chambers (1896) says: "So far as morality and respect for law and order are concerned, these Montagnais and Nascapees of Labrador will now, as a rule, compare favorably with those boasting a loftier Christianity and a higher plane of civilization." Although they fondly cling to many of their old beliefs and superstitions "Christianity and the northerly advance of civilization have done much for these poor people." In 1808 Mackenzie declared that in the Montagnais he found "concentrated all the vices of the whites and Nascapees, without one of their virtues." They were "neither Nascapees nor whites, but a spurious breed between both."

The songs and dances known to have existed among the Micmacs indicate that, although their environment was not always one of plenty and abundance, they could at times be merry of heart and soul. The sense of humor in their myths and folk-lore is also notable. Maclean (1896) describes the Micmacs of Quebec, New Brunswick, Prince Edward Island and Nova Scotia as to a large extent "honest and industrious," but often much given to drunkenness and parasitism upon the whites of the towns. Those of Nova Scotia seem to have the best reputation, being "generally self-supporting, and reputed an honest, industrious and law-abiding people." Poverty and drunkenness appear to be the chief troubles of the Micmacs. The Abenakis are credited by the older chronicles with being of a gentler and more docile disposition than the Algonkians further west. The "Abenakis" of the river St. John were described in 1881 by Mr. Edward Jack as "a civil, harmless people, not nearly so much addicted to strong drink as they once were." Before being affected by contact with the whites the condition of these "Abenakis" is stated thus by Mr. Montague Chamberlain (1895): "They were honest, truthful and just; hospitable to a fault and unswerving in their fidelity to their friends. They are still hospitable, and the best of them are honest and faithful." While possessing marked reserve, bashfulness in the presence of strangers and keen sensitivity to ridicule, "when among intimates they converse with ease and volubility; repartee is much enjoyed, and their conversation is spirited, and not infrequently very mirthful."

*Intellect, senses, etc.* Before the arrival of the missionaries and the commencement of their work among them, the Montagnais, etc., are described, but with some exaggeration, as Algonkians of the lowest type, suffering from malnutrition and all its effects. Their ability as canoe-men, their skill in hunting to-day are, however, praised by the whites. Chambers (1902) says: "In the waters that are the highways through their northern hunting grounds they are the most skillful canoe-men and best of guides. Ashore, in the practically trackless forest, they are the most polite and obliging of servants. No domestic was ever more particular about the comfort of her mistress



than these Montagnais are in promoting that of their patrons in camp or canoe." According to Turner (1883) the Naskapi Indian is "not the physical superior of the Eskimo," and he has less ability to endure fatigue, but is, perhaps, as able to bear the effects of cold. Enmity and hatred among them chiefly arise through the sexual passion. Men exhibit jealousy less than women. According to Turner, among the Naskapi, women are less demonstrative than men, who, "after a protracted absence from each other, often embrace and shed tears of joy." The Naskapi, although not such good marksmen as the Eskimo, excel the latter in rapid firing. The feeling for cruelty now vents itself on the wolverine, which the Naskapi is said to take delight in torturing. In wrestling, of which they are fond, they fail to defeat the Eskimo, who are physically stronger. They do not readily swim; and have invented a kind of "swimming board" for use in the hand. That the intellect of the Micmacs and allied tribes is of a higher order than has generally been attributed to them is shown by the contents and motifs of many of their myths and legends, songs, etc., some of the last exhibiting a remarkable purity of thought and diction. Of the Passamaquoddy song telling of the attack of the squirrels on the Lappilatwan-bird, Professor Prince says that he can find "no parallel in any other literature." The summer-song, and the song of the loves of the leaf and the fire-bird are, likewise, noteworthy. Professor Prince (1902) says of the Micmacs that "their grade of intelligence is much lower than that of the other members of the same (Abenaki-Wabanaki) family, but they still have a vast store of folk-lore, legends, and poems." Rand gives a higher position, apparently, to the Micmacs than does Prince, and ascribes to them great knowledge of plants and animals, topographical lore and memory, etc. Many Micmacs and individuals from closely related tribes have been expert guides, canoeemen, etc., for the whites. They are also exceedingly skilful with the spear as fishers, and with the gun and rifle as hunters. The moose-calls of the Micmacs and the wild-geese call of the Naskapi and several other hunting devices of these Indians are worth recording.

*Health and disease.* The Montagnais and related tribes, even in the early days, when the missionaries first met them, were subject to such diseases as resulted from lack of nutritious food. They had been driven from more satisfactory habitats by the Iroquois, and often felt the effects of famine. They had also to compete with the Eskimo, to whom Turner (1883) ascribes "greater endurance and perseverance." The prevailing diseases among the Naskapi are those of the lungs and the bowels, due to exposure to extremes of wet and cold, and the inhaling of the smoke and foul air of the wigwam. Half the illnesses that afflict them "are due to gluttony." Turner also reports that "indolent ulcers and scrofulous complications are frequent." For remedies they resort to the shaman, with his drum and incantations, and to "potions compounded by the white trader, in which they have unlimited faith. They are fond of the steam bath and possess the characteristic Indian "sweat-house." Some of the Montagnais (e.g., the Attikamegs, of the St. Maurice basin, in 1670) have been practically exterminated by the smallpox.

In the legends of the Passamaquoddies and related tribes, *K'seenoka*, "Disease," is represented as being the poohegan, or "guardian spirit" of a witch, named Kwagsis ("Fox"), who was sent by a great



chief to afflict the "Giant Witch" with sores and boils, and aches and pains. The "Giant Witch," however, was cured of all his diseases, by Kwiliphoit, the god of medicine who sent him, by the humming-bird, the healing plant *keekayween' bisoon*. The extra-individual and "magic" origin of disease is typified in other incidents in the tales of these Indians. Resort to cure by the devices of the shaman was widespread among the Indians of the Eastern Provinces. Drunkenness and diseases, due to immoral relations with the whites, together with the troubles from malnutrition, are their chief afflictions in modern times. Where they are at all in favorable circumstances, these Indians are not dying out rapidly, but rather holding their own. Turner (1883) reports of the Naskapi that during the two years he was with them the mortality appeared to be low, and births exceeded deaths. The Dominion statistics for 1904 indicate that in each of the Provinces of Quebec, New Brunswick, Nova Scotia and Prince Edward Island the number of births among the Indian population exceeded the deaths. There appears also to have been an actual increase in the total number of Indians in Quebec and Nova Scotia, and a small decrease in those in New Brunswick and Prince Edward Island.

*Occupations, industries, arts.* The Naskapi are and have been chiefly hunters and fishers, the former more characteristically. The deer, the bear, the wolf, the beaver, the wolverine, and other small game are killed for their skins or for food purposes (the caribou "provides them with the greater part of their food and the skins afford them clothing"). The bow and arrow, formerly much in use among the Naskapi and Montagnais, has been practically driven out (except the blunt arrow for killing ptarmigan, rabbits, and those used by boys in shooting at board images of animals, etc.) by the white man's gun. Small cross-bows (imitated from the whites) are also used by children, along with their own bows and arrows, to shoot birds. Among the characteristic weapons and implements of the Naskapi, as described by Turner (1883) are the lance or spear (used particularly for deer), the caribou-snare, the beaver-net, etc. Snaring methods of taking game were formerly much more in vogue. Other implements and tools in use among the Naskapi are the 'crooked knife,' skin-scrapers, awls, ice-picks, ice scoops and shovels, etc. For purposes of travel and transportation these Indians have the snow-shoe (in four styles) the toboggan and the birch-bark canoe (two sorts). The Naskapi seem to be much less interested in or expert at fishing than hunting. According to Chambers, "the Nascapes cared little for fish or fishing, so long as game was plentiful." Nevertheless, the Montagnais have furnished to the world in *ouananiche*, the name of an important game fish.

The Micmac and related tribes were also essentially hunters and fishers, their situation enabling them to pursue both occupations, which are, consequently referred to in tales and legends. As spearers of salmon, takers of cod and pollock, killers of moose, etc., they have long been famous. In their hunting and fishing they have been more influenced by long contact with the whites than the Naskapi and Montagnais, but have also given more to the whites, particularly the Canadian French, as is proved by the entrance into the European languages of America of such words as *caribou*, *killhag*, *nigog*, *poke-loken*, *pung* and *toboggan*, *sagamore*, *togue*, *touladi*, etc. It was

from the old Micmacs that the whites borrowed the toboggan. Some of these Indians, like the Naskapi and Montagnais (here, however, the environment was less favorable) showed no marked tendency towards agriculture, although in parts of the Micmac area corn, beans and squashes were cultivated. What Gatschet (1897) says of the Passamaquoddies applies, or did apply, to some other tribes. "Fishing is one of their chief industries, but in this they now follow entirely the example set by the white man; they care nothing for agriculture, and their village at Pleasant Point is built upon the rockiest and most unproductive ground that could be selected." The agriculturally-disposed section of the Montagnais at présent consists of those of mixed blood. Root-grubbing, peeling of the inner bark of trees, gathering and drying berries, etc., were the commonest provender-occupations, outside of hunting and fishing. The Indians of the Eastern Provinces manufactured considerable bark and woodenware (the French-Canadian word for a large wooden spoon, *micouenne* is of Micmac origin).

The artistic sense of the Naskapi expresses itself in the ornamentation of their skin clothing, etc. (paint, beadwork), the buckskin garments are decorated by means of paints (native and obtained from the trader) applied with bits of bone or horn of a peculiar shape, quite complicated patterns being sometimes laid on.

The highest limit of art among the Micmacs and closely related tribes is reached in the pictography on birch-bark, in quill and beadwork, basketry, etc. Some of the tribes had also a sort of mnemonic wampum record (strings of shells). These things made easier the acquisition of the Micmac hieroglyphs of Kauder (1866) in which quite an amount of religious literature has been published. Body-painting and personal adornment with shells and feathers were in vogue in earlier days. Though these Indians have been much influenced by the introduction of ideas and materials from the whites, their manufactures of to-day (canoes, vessels of bark of all sorts, baskets, various souvenirs and knicknacks for the tourist and summer-visitor) show that they have not altogether forgotten their ancient arts and industries.

*Games and amusements.* The Naskapi, according to Turner (1883), are very fond of a sort of game of draughts or checkers which they play day and night,—“some of the men are so expert that they would rank as skilful players in any part of the world.” They have also a “cup-and-ball” game. They had a number of dances and festivals. Their only musical instrument is the drum. The children have rattles, dolls and other toys.

The Micmacs and closely related tribes had a sort of dice-game (pre-Columbian) known as *wolteskomkwon* or *wodtestakun*, the invention of which is attributed to Glooskap, also another called *wobunamunk*, said to have been invented by the turtle. Bone disks and counting-sticks were in use with these games, which were played with a wooden bowl (or, later, the “dice” were thrown on a blanket), etc. These Indians had also a sort of football game called *tooadijik*, and one lacrosse known as *madijik*. It is said during the four days after weddings games were played, among them the dice-game, football and lacrosse. The Micmacs, etc., had also numerous dances and festivals of a more or less social or entertaining nature. References to games and gambling occur often in the myths and legends. Like



many other Indians, some of the eastern Algonkians have taken readily to the playing cards of the whites.

*Social and political organization.* The Montagnais and Naskapi seem to have been polygamous in the early days, with very loose sexual morality, ability to maintain them being the limit of the number of wives taken. Turner (1883) says of the Naskapi that "their sexual relation are very loose among themselves, but their immorality is confined to themselves." Polygamy is still common (marriage takes place early), divorce is easy, and, as with the Montagnais, women are decidedly social inferiors. Among the Micmacs and closely related tribes the position of woman seems not to have been very high (although female chiefs are occasionally mentioned). The marriage ceremony among the eastern Algonkians was simple, the feast or festival in connection therewith being the principal thing (they lasted sometimes for a whole week). With some of the Abenaki tribes more detailed marriage ceremonies (influenced by white customs possibly) came into use. The children of the Eastern Algonkians were well-behaved and chastisement was very rare or absent,—so also disputes between children and among youths.

The Naskapi and Montagnais seem to have had special family rights in hunting-grounds (inviolable by others). These rights were vested in the woman, the men acquiring them only by marriage. Descent in the so-called "Abnaki tribes" appears to have been reckoned in the female line. Their animal totems seem to have been numerous (bear, beaver, otter, partridge, etc.).

Among the Naskapi and the Montagnais, and probably also among some of the more southern Eastern Algonkians the custom of killing the old people prevailed and they are said also to have been sometimes eaten by their friends (the hearts of warriors were also devoured to inspire courage).

To-day the chiefs of the Eastern Algonkians are elective (under the influence of the missionaries and the government to some extent). According to Rand, the Micmac council now has in it representatives of ten different tribes. The characteristic council of the old men (among some of the New Brunswick Indians appointed by the chief) was presided over by the *sakem* (our *sachem* and *sagamore* are both loan-words from Micmac, etc.), or chiefs, elected by the people at large, and limited in power by actions of the council. The death of a chief was marked by appropriate ceremonies and likewise the installation of the new one. According to Prince, "the members of one tribe alone could not elect its chief according to the common laws of the allied nations, he had to be chosen by a 'general wigwam'"—the Micmacs, Penobscots, and Maliseets thus helped choose a chief for the Passamaquoddies, and so on. This was in the days of the "confederacy." The largest developed social center of the individual tribes appears to have been the stockaded village of the Micmacs. Gatherings of several of the tribes at fixed places for various purposes were quite common,—islands often served for such meetings. Their summer camps were really often stockaded "villages" with a dance-ground in the center.

*Religion, superstition, etc.* According to recent authorities, the Montagnais Indians, especially those toward the interior, still continue many of their old heathen practices. They originally had the common Algonkian belief in manitous, spirits or mysterious beings,



both good and evil, but now, somewhat influenced by the teachings of the whites, they have a "bad spirit" and a "good spirit," the latter being so good that he is neither feared nor worshiped, although to him is often attributed the creation of the earth and the making of man, the other a busy being, spending time and labor in seeking to frustrate and undo the good works of the other. Mackenzie (1808) reported the Montagnais and Naskapi as believing in a deity who created the animals and allotted them to the Indians, who invoke him in time of need,—this god was "no longer than their little finger, dressed in white, and called *Kawabapishit* (or the White Spirit)." They held in special regard the bear and the moose, the former being the object of peculiar rites both among the Montagnais and the Naskapi. When the first bear of the season had been killed a great festival was held in honor of *Kawabapishit*,—in the centre was placed the skin of the animal, "stuffed with hay, and the head and paws decorated with beads, quills and vermillion." The bones were subsequently ceremoniously suspended from a pole. The skulls of bears were placed one above another on poles with pieces of tobacco in the jaws. The heads of some other animals (also of the pike) were sometimes suspended in similar fashion. With the Naskapi, according to Chambers, "the painted skin of a bear forms an essential part of the outfit of their conjurers or medicine men." The animals all have their own spirits, which live on after death, clothed in other material forms, so that the number of the species is not diminished by the Indian slaughter of beasts of the chase. Although the Indians revere the bear so much, he is, nevertheless, the one they most desire to kill (hand-to-hand contests are even reported). From a wish not to offend the spirit of any animal they may kill, the Indians never throw its bones to the dogs, but bury them in the ground, sink them in deep water, or reduce them to ashes in the fire.

The Montagnais and Naskapi have always been noted for their "jugglery," or shamanism, still flourishing among the pagan Indians and not unknown among the Christian at the present day. The medicine-man practices his *ikanze*, or "sorcery," in a special "lodge" of small dimension, in which he invokes the spirits of all sorts, who visit him there,—even *Kawabapishit* is seen and conversed with. The processes and implements employed include bodily contortions (till exhaustion is induced), drum and rattle, groaning and chanting "magic formulae," etc. Some of these shamans have impressed the whites by their "spiritualistic" performances, prophecies and the like. The prayer of the shaman for a good hunting-season is stated by Mackenzie (in Chambers) thus: "Great master of animals among the clouds, bless us, and let us continue to make as good a hunt as usual."

The Montagnais and Naskapi, since the arrival of the whites and the missionaries, have adopted interment for the disposal of their dead to a large extent,—in earlier days scaffold burial and suspension from trees were in vogue. According to Turner (1883) the Naskapi have no such dread of a corpse as have the Eskimo, but will often rifle the graves of the latter, or even strip the clothing from an individual recently deceased.

Upon the Abenakis, Micmacs and closely related tribes the teachings of the whites with whom they have been so long in contact have exerted considerable influence, particularly in the matter of religious

ideas, even where the Indians have not been converted to Christianity. Of the "Abenakis" (properly Maliseets) of the River St. John, near Fredericton, Mr. Edward Jack (1892) says that they called the "Great Spirit" *Ketsi Niuaskoo*, and the "Evil Spirit" *Matsi Niuaskoo*,—adding that "one of my Indian friends said to me he had read about the latter in his catechism, and that he is the devil." In Micmac *mundoo* (the Algonquian general term for "spirit," mysterious being) now signifies "devil," and several words for "God" have arisen,—*Nizkam*, "Our Father;" *Nesulk*, "Our Maker;" *Ukchesakamou*, "Great Chief." The older Etchemin and Sheshatapoosh vocabularies give for "God" *saisos* and *shayshoursh*, respectively, which are evidently corruptions of the *Jésus* of the French missionaries. The so-called "evil spirit" is said to have been the one chiefly "worshipped" by the Indians of Acadia. The Micmacs and related tribes were profound believers in the powers of the "wizard" or "sorcerer," of whom the earlier chroniclers had so much to say. Tales of his power of transformation, ability to "curse" and cast spells, sink into the earth, communicate at a distance, fly through the air, remain under water, etc., abound. These "medicine men" were formidable opponents of the Christian priests, as the tale recorded by Prince and Leland, of "the wizard and the Christian priest" indicates. Rand, in 1850, said "the present generation appears to be as firmly rooted in the belief of supernatural powers exercised by men as ever their fathers were," and Prince, in 1902, notes that this belief still survives among these Indians to a large extent, "though subordinate of course to the Catholic doctrine, which nearly all of them (Passamoquoddies) profess." The Abenakis of St. Francis, Que., are very closely related to the Penobscot Indians of Maine, and the older religious beliefs and superstitions, now abandoned, correspond to those of that people.

In their adoption of Christianity, the Indians of the Eastern Provinces have practically all accepted Catholicism, very few Protestants being found among them.

*Mythology and folklore.* The mythology and folklore of the Montagnais and Naskapi Indians, like their language, are closely related to that of the Cree and cognate tribes of the Hudson's Bay region. Turner (1883) reports that the Naskapi "older men have a great stock of stories, and many of the women are noted for their ability in entertaining the children, who sit, with staring eyes and open mouth, in the arms of their parents or elders." Among the creatures figuring in their animal-stories are the wolverine (the embodiment of cunning and mischief), the reindeer, the squirrel, the otter, the wolf, the bear, the rabbit, the frog, the muskrat, the beaver, the martin, etc. In one legend the beaver and the muskrat are represented as creating the white man, the Indian, the Eskimo, the Iroquois and the negro,—the muskrat was the mother, the wolverine the father of all. After these children grew up they separated and scattered over the country as they are found now. The prominence of "starvation" in the stories of the Montagnais and Naskapi is accompanied by the persistence among them of anthropophagous practices, in most cases "hunger-cannibalism." Belief in the *witiku* (the *wendigo* of western Algonkians), or man-eating demon is strong with the heathen, and in many cases also, with the Christian Indians. Many instances are cited where Indians are said to have gone mad



suddenly, and turned into *witikus*, with an insatiable desire for human flesh. One can see in these beliefs a reflection of the environment of these Indians, who time and again must have been subject to famine and liable to extinction for lack of food, particularly when the game animals migrated to long distances from their usual habitat, or were themselves stricken by some disease or other. Lunatics and epileptics, people who suddenly lose their reason for a time, are still regarded by some of the Indians of the interior as wendigos, and are killed by stealth. Chambers informs us that these man-eating monsters, called by the Naskapi *atshem*, are believed to appear in the forms of sorcerers, man-eating moose, or as creatures rivaling the classic Cyclops and the Homeric Polyphemus. *Windigo* river has received its name from the fact that the Indians avoid it, believing that it is the "hunting ground" of a monster of this sort. The most notable figure in the mythology and folklore of the Micmacs, and related tribes is *Glooskap* (in Passamaquoddy *Kulóskap*, Penobscot *Klúskábe*), corresponding to the Ojibwa *Manabush*, or *Naniboju*, the Cree *Wisaketchak*, etc., and like these, appearing sometimes in the light of a trickster, deceiver, or even buffoon. His name really signifies "the liar," some say because he promised to return, and has never done; but others, with Prince, hold that he is so termed, "not because he deceives or injures man, but because he is clever enough to lead his enemies astray, the highest possible virtue to the early American mind." The "epic of Glooskap," as it has been styled, tells how he created man and became his friend, did many great things for him, made and named the animals (afterwards conquering and transforming some of them) victoriously fought and destroyed giants, sorcerers, monsters of all kinds ("cleaned up the world"), found the summer, etc., and afterward, angered at the ways of men and animals, left the world, sailing over sea in his canoe, promising to return some day. The departure of the culture-hero caused the inhabitants of the world to lose much that was common to them in habits, languages, ideas, and resulted in the separation of man from the animals and the differences now existing in the habits of the beasts, birds, fishes, etc. Another prominent figure in Micmac mythology is *Lox* (Abenaki *Alaskan*), the wolverine, a great mischief-maker, and deceiver. Others of importance are the rabbit (who is often very cunning), the serpent (who cohabits with women), the partridge (a "great hero"), the martin (servant of Glooskap), the bear, the badger, the woodchuck, the whale, the beaver, the tortoise, the loon (magician and friend and messenger of Glooskap), the owl (counsellor and friend of Glooskap), the flying-squirrel, the fish-hawk, etc. Figures of a somewhat different sort are the thunder-bird; *Wuchousen*, the "wind-bird;" the giant-bird, *Kulloo*; *Kewok*, formless and icy-hearted; the *Chenoo*, or northern giant; *Kulpujot*, a shapeless being, whose turning over (his name signifies "rolled over with handspikes") twice a year produces flowers. Many of the characters in the legends of the Micmac and related tribes are of a very curious nature. There are many stories of dwarfs and giants. In some cases a close approach is made to the European folk-tale. As may be seen from the examples in Leland and Prince, as well as in the collection of Rand, witchcraft lore is abundant. The story of how the baby conquered Gluskap deserves a place in the world's best literature of childhood. "Fairies," tree-spirits, water-spirits and monsters, etc., are the subject of many stories.



In some of the tales cannibalism (especially by wizards) is referred to, and even cannibalistic feasts are mentioned, but there is no particular reason to believe that anthropophagy was ever common among them,—hunger and ritual account probably for most cases occurring.

*Language.* The speech of the Montagnais and Naskapi (and of the practically extinct Skoffie) is closely related to that of the Crées, with which branch of the Algonquian stock it belongs. Turner (1883) attributes the differences between these tribes, in the matter of language, "wholly to environment." The oldest specimen we possess of an Algonkian text is one of the "Montagnards," as they were known to Champlain, who met them at their great trading-place (Tadousac) at the mouth of the Saguenay. The changes in the language since his day are not nearly so great as some writers have imagined (this is shown by reference to the vocabularies dating from 1808, published by the Massachusetts Historical Society). Chambers (1896) describes the Montagnais as "an exceedingly expressive language, and very rich in varieties of inflection." The verbal forms, like those of some other Algonkian languages are exhaustive. The dialect of these Montagnais Indians once extended, apparently, high up the St. Lawrence (perhaps as far as Montreal), and Father Le Jeune, in 1636, states that "whoever should know perfectly the language of the Quebec Indians would, I think, be understood by all the nations from Newfoundland to the Hurons,"—this is probably somewhat exaggerated. Father Le Jeune reported likewise that between the language of the Montagnards and that of the Nipissiriniens (the so-called "true Algonquins") "there is no greater difference than between dialects spoken in different provinces of France." The Montagnais is, with certain varieties of Cree, the only Algonkian language in which the letter *r* is in normal and extensive use.

The language of the Canadian Abenakis of St. Francis has been recently investigated by Professor J. Dyneley Prince, who finds it very closely akin to that of the Penobscots of Maine, indeed, "we have to deal with a dialectical differentiation which must have taken place within a period of 222 years, *i.e.*, from 1679 to 1901, during which time practically no communication has taken place between the Maine Indians and their Canadian cousins, except the visits of a few wandering hunters." The main differences are of a phonetic nature, the Penobscot being more archaic. Penobscot has also preserved the obviative *l*, and kept intact to a greater extent the "original pure polysynthesis." The vocabularies have not deviated widely. The Akenaki, however, has retained the ancient nasal sound, which seems to have practically disappeared in Penobscot. The Abenaki has also changed the system of intonation, which the Penobscot, and the Passamaquoddy, have retained with greater purity. The voice *timbre* of the Abenakis is also lower. Abenaki contact with the French may account for some of these changes. Abenaki, like Penobscot (and Passamaquoddy) lacks "the so-called sur-obviative or third person of Cree and Ojibwa." The following sentences from Prince will indicate how close is the relationship between Abenaki, Penobscot and Passamaquoddy:

1. *English*: My brother told me long ago there quarreled certain wizards.

2. *Abenaki*: Nijia ndonhdokaokw nauwat kizgat nozigad'n awodo-wak m'deaulinwak.

3. *Penobscot*: Nijia ndonhdonhkeukw nauwat kizgong'sigad'n awodohid'wak mdeaulin'wak.

4. *Passamaquoddy*: Nziwes ntulag'nod'mak piche kiskakesigd'n madndoltitit mteaulinwuk.

The Micmac language, as compared with such a standard Algonkian tongue as *e.g.*, the Cree of Ojibwa, shows marked divergence in vocabulary and certain grammatic and phonetic peculiarities, which suggest (the same may be said of the Blackfoot at the other extreme of the Algonkian area) a disturbance due to the former presence, perhaps, of some non-Algonkian form of speech in the Micmac country. Concerning the relation of the Micmac to those of the cognate tribes Professor Prince says (1902); "Their language differs so greatly from the dialects of the Penobscots, Abenakis, and Passamaquoddies that the members of these clans always use English or French when communicating with their Micmac neighbors, while an intelligent Passamaquoddy can without difficulty understand a Penobscot or Abenaki, if the dialect is pronounced slowly." The Abenaki (and Penobscot) the Maliseet (Etchemin, Passamaquoddy), and the Micmac—with closely related dialects now or formerly existing in what was called Acadia and part of the region to the west and north—constitute a branch of the Algonkian stock; and also a confederacy, in former times, said to have included also the Delawares or Lenâpe. To this confederacy the name *Wabanaki* (*Abenaki*), now retained as a tribal appellation by the Canadian Abenakis, was applied as a generic term, though there is some dispute as to its exact significance. Gatschet in 1897, applies the name *Abnaki* to the Penobscots of Oldtown, Me., the St. Francis Indians of Quebec, the Passamaquoddies of Maine, the Milicites (or Etchemins) of the St. John's River, N.B., and the Micmacs of Nova Scotia and eastern New Brunswick, etc. These are "the surviving Abnaki peoples."

As a specimen of the Micmac language the following translation of the first verses of the Gospel of John may serve:

1. Tan umskwes poktumkeaak Kulooswokun ahkup, ak Kuloosk-wokun tegwaoobunul Nikskamul, ak Kulooswookun Niskamawip.

2. Na Negun tan umskwes poktumkeaak, tegwaoobunul Niskamul.

3. 'Msit cogooaal weje-kesedasiksubunigul Negun ootenink, ak tan cogooa Negun moo kesedooksup, na moo kesedasenooksup.

4. Memajooookun ootenink ahkup, ak na memâjooenook oowosogwegumooowna.

5. Ak wosogwek wosadek bogunitpaak iktook ak bogunitpaak moo weswadoogoop.

Within the Micmac area there appear to have some slight dialectic variations at least; but, according to Rand, the diversity includes only the use and pronunciation of a few words. The Micmacs of Cape Breton pride themselves on the purity of their language at the expense of the Micmacs of Nova Scotia, and vice-versa; so too those of Prince Edward's Island and Mirimichi.

For further information concerning the Indians of the eastern Province of Canada reference may be had to the works cited under

the various tribal names in Pilling's "Bibliography of the Algonquian Languages" (1891) and to the following others: Montagnais, Chambers, "The Ounaniche" (1896), and the list of authorities therein. Naskapi: Turner, Rep. Bur. Ethnol., 1889-90. Micmac, etc.: "Leland, Algonquian Legends of New England" (1885); Leland and Prince, "Kulóskap, the Master" (1902); Prince, various articles in the proceedings of the American Philosophical Society (1897, 1900), American Journal of Philology (1888, 1901), American Anthropologist (1902), etc.; Hagar, various articles in American Anthropologist (1895), and Journal of American Folklore (1896); Montague Chamberlain, "The Abenaki Indians" (1895); and Jack, "The Abenakis of the St. John's River," in Transactions of the Canadian Institute, Toronto (1891-92), and other writings of the last two authorities.

#### 4. CENTRAL ALGONKIN.

By WILLIAM JONES.

##### INTRODUCTION.

This paper is nothing more than a general sketch. It deals in brief outline with some of the larger aspects that made up the social, material, and religious life of the Ojibwas. The basis of the paper throughout rests on the results obtained during a period of about ten months of work in the field. Some of the statements are based on observation, some on the verbal information given by the Ojibwas themselves, and some on the references told of in myth and tradition. The references of myth and tradition are valuable in that they deal with events and conditions of an ancient life; with former customs which may survive only in a small remote group of silent hunters; and with the explanation of the work of nature and the origin of things, thus betraying the character of the old philosophy of the Ojibwas. It seems best in so short a description to avoid as far as possible the use of Ojibwa terms.

##### SOCIETY.

The social life of the Ojibwas was in many ways the same as that which prevailed among other Algonkin tribes who lived in the territory southward. There was a large number of clans, and some of them seemed to have been grouped under a feeble form of phratry.

Marriage was between a man and woman of different clans, and was usually attended with an exchange of presents between the families of the bride and groom. It was usual for a man to marry the widow of his brother, and a widower might marry the sister of his dead wife. Children followed the clan of the father. There is reason to believe that the giving of a name once had an intimate relation with the clan. But at present there is little or no connection between the name and the clan. Now-a-days a child obtains its name from an old man or an aged woman who has been chosen by the parents to act the role of a sponser. And the name given the child generally though not always bears some reference to the manitou especially revered by the sponser. For instance, had the man in his youth and during a fast dreamed of the spirit and had thereby experienced an



emotional thrill which conveyed a deep sense of mystery, and if afterwards he had had occasion to believe that the sky was the source of his life and the cause of bountiful gifts, then was it likely that the name he gave would have some particular connection with the sky; for it would be his aim to place the child under the same power which he had found so benevolent to him. Such, for example, is the origin of a name like Mica'kigijik (Misha'kigijik), which means *Flood-of-Light-pouring-from-the-Sky*."

#### GOVERNMENT.

The political organization of the Ojibwas was loose, even at the time of the first coming of the French. There was a general council with vague and limited powers, and it was possible for every man, if he liked, to become a member of the council. In this body, which was controlled by social customs and religious practices, was vested the government such as it was. It was by the council supported by public assent that a chief was selected. His power was even vaguer than that of the council, and he was less able to work his will against an existing custom. Some chiefs were able men politically and had also been successful leaders of war parties. It was common, on the death of the chief, to hand the office over to his son, particularly if the son had displayed courage, was of pleasing personality, and had given evidence of political capacity. Some chiefs have had much homage paid them by their people.

Such a council and such a chief were limited to a group. By a group is meant a body of Ojibwa that held sway over a given district and who went under a common name; as for example, Bawi'tigowiniwag, *men or people of the rapids* was the name of the Ojibwas at Sault Ste. Marie; they were called Saulteurs by the French. There was neither a general council nor a head chief for the whole people. Some clans like the Crane and Bullhead have sometimes been regarded by their members as the leading clans of the tribe; and chiefs of the Crane clan, more especially those at the Sault, have considered themselves the head chiefs of all the Ojibwas. But it is doubtful if either assumption was ever recognized by the other groups of the tribe.

The question of justice was bound up with the social customs that regulated the clan. The individual was lost in the clan, and a man could not avenge a personal injury without running counter to the bond that linked individuals together in a clan. An injury to an individual was an injury to the clan, and a satisfaction given for the injury was a satisfaction rather to the clan than to the individual.

#### PROPERTY.

Property rights were vaguely defined. There were some things which could come under one's sole possession. Such were: personal belongings, like wearing apparel and objects of decoration; weapons, and the various contrivances used in the quest of food; snow shoes, canoes, toboggan and dogs, all of which were both a means of travel and of getting food; meat of every kind of game killed by the hunter, and maple sugar, cereals, and all foods obtained and prepared by women; a cache where any of these things were stored, and the pack containing them which had been left on a portage; and finally the

lodge where one lived. Every one had a common right to use any part of the land not already in use by another; the ultimate title to the land rested in the tribal group. An exclusive right to the use of the land was recognized; for example, one could hold without interference, and for an indefinite period the spot on which the lodge stood, and the plot of ground under cultivation. An exclusive right to the use of a portion of a rice bed was allowed, but it was temporary. A woman might select a patch of rice before it was time to harvest, and bind the tops of the stalks standing near together. The patch might be hers until she had harvested the rice, and then her exclusive right to its use came to an end. For the time being, the patch of rice stood in much the same relation as the place of a trap or a net rather than in that of a plot of ground under cultivation.

Possession had an intimate connection with occupation. For instance, the implements used in the chase, the canoe, the toboggan, and dogs were generally the peculiar property of the man; and on the other hand, the lodge with its house-hold effects, maple sugar, cereals, and skins belonged to the woman. In the event of separation of man from his wife, the child went with the mother.

#### DWELLINGS.

There were two characteristic forms of the Ojibwa dwelling, the bark house and oval lodge. The inside structure of the bark house was a frame of upright posts set in the ground; a post generally forked at the top, stood at each corner, and a higher post stood at the centre of each end; in between the posts stood poles; a large pole connected the two end posts and formed the ridge while smaller poles joined one corner post with another; smaller poles served for the rafters. All the poles, big and small, were held in place by cords made from the fibre of the bass and linn, and from the root of the spruce; sometimes use was made of pegs. The bark covering the frame was from elm or cedar; it was stripped in sheets, and was laid on horizontally, and overlapped from the bottom up; the bark was held in place by cord and by another frame on the outside. There were two forms of the roof, oval and gabled; the gabled roof was more common. There was usually but a single door, and it opened at one of the ends, and out in the direction away from the prevailing storms; a skin or a blanket hung like a flap over the entrance; the door was boarded up with bark when the occupants went away to be gone for a long time. Near the centre and towards the door was the fire; the smoke lifted through an opening at the top. The space between the fire and the wall was the living place; sometimes it was covered with mats spread on a bed of balsam boughs; and again a raised platform ran around the two sides and the end. The size of the houses varied with the number of people dwelling in them; they were probably never so large as the communal houses found among other Algonkin tribes who dwelt southward.

The oval lodge was built on a frame of two sets of poles. The poles of one set were placed upright in the ground; they generally went in pairs and stood at opposite sides of the frame; their tops were bent over to meet and when bound together formed an arch; the arches forward and rear were lower than those in the centre; additional poles arched toward the centre from the front and rear. The

other set of poles was laid horizontal to the arches and helped to brace the frame; the fastening of pole to pole was done with native cord. The covering of the oval lodge varied. The Ojibwas of the south made use of flag-reed mats, and those of the north used sheets of birch bark stitched end on end. Both kinds of covering were used in the districts where the materials of both could be had. The cover of reed or bark overlapped and was held down by cord and leaning poles. Strips of elm and cedar bark often formed the covering of the wall; they generally stood on end and overlapped at the sides; and they usually required an external set of arches to hold them in place. The fire-place, the arrangement of the space between the fire and the wall, and the appearance of the interior were much the same as in the bark house.

The bark house was characteristic of the village and of a settled abode; it was the home in the milder seasons of the year. The oval lodge might be seen at all times in the village, but its special use was as a home in cold weather.

Other forms of the Ojibwa dwelling were the conical lodge and a long lean-to with gable roof. The conical lodge was like that of the plains, and was built on a frame of upright poles meeting at the top. The architecture of the lean-to resembled that of the bark house; but the lean-to was low, long, and generally with a door at each end. The covering of both kinds of dwelling was usually of birchbark, but where flag-reed was obtained, mats were used with the sheets of birch bark. Such dwellings were more common with the Ojibwas of the north shore of Lake Superior.

### Food.

The Ojibwas have always been a typical people of the woods. Those of the north shore of Lake Superior had few settlements, for they led a hunting life. One or more families disappeared in the bush, and did not emerge except to dispose of furs or to attend a general gathering. Many of these wandering fragments penetrated the district of Hudson's Bay and came into lively contact with the Crees. Some got round to the farther shores of the Lake and strayed off towards the Lake-of-the-Woods, and the country west and north. The voyageurs followed in their wake, and the trading posts they established often formed the nucleus of a community of these wandering hunters. The Fort William Band was one of the largest of the offshoots from the Ojibwas of the Sault.

The Ojibaws south of the Straits of Mackinaw, round about the Sault, and off the south shore of Lake Superior led part of the time a sort of sedentary life. They had villages, and cultivated the ground for maize, pumpkins, and beans. Most of them were probably acquainted with wild rice.

At the same time much of the food and the greater part of the clothing of all were obtained by hunting and fishing. Among the animals that made up the source of most of their clothing and a good deal of their food were the moose, elk, deer, bear, beaver, muskrat and rabbit. Some of the Ojibwas hunted the buffalo and caribou. The principal fish for food were whitefish, trout, pike, pickerel, and sturgeon; and of birds preference was given the goose, raven-duck, mallard, wood-duck, and fall-duck. The fall-duck was especially desired because late in the fall a great deal of grease was obtained



from it. Great quantities of sugar were obtained from maple and birch in the season when the sap was running and stored away in birch bark boxes. Strawberries, raspberries, and blackberries were a food only so long as the season lasted, but huckleberries and blueberries could be dried in the sun and preserved for future use.

#### MODES OF KILLING GAME.

Game was obtained in a variety of ways. Bear, beaver, otter, mink, muskrat, and the like were caught by a wooden trap sprung by trigger and catch in combination with a weight. Moose, caribou, elk, and deer were slain with the bow and arrow; they could be overtaken by canoe when swimming, and killed by cutting the throat; a woman could kill a moose or a deer by punching an opening between the ribs with a paddle; the hole let in the water which caused the animal to weaken and drown. Buffaloes were driven into enclosures and shot to death with the bow and arrow. Rabbits and partridges were caught with the snare. Fish were caught part of the time in weirs and all the year with hook, spear, and net; fish were also shot with the arrow. Ducks were often taken in the same nets set for fish; in the rice fields late in the fall they were easily approached by canoe and slain in great numbers with the bow and arrow or simply with the paddle used as a club; they were then heavy with fat and were slow to rise. Eagles were clubbed; bait was set for them in a thicket where it was made hard for the bird to escape before the arrival of the hunter.

#### COOKING.

Most of the food was cooked. Meat was boiled, or roasted. Birds were boiled, or roasted, or baked in a bed of ashes and live coals; a common way of baking was to enclose the bird in a ball of clay, and then lay the ball in the bed of hot ashes. Gull eggs were boiled, or baked in ashes. Cereals were boiled, or roasted, or parched; the parching was done in a vessel, or near or in a bed of hot coals; corn might be roasted on the ear.

Tradition tells that boiling was done in earthen, wooden, and bark vessels; that the water was heated by the fire beneath or by hot stones put into the vessel; and that the bark vessel was generally of birch and would not flame if put over the fire with the water already in and if the fire was a bed of live coals.

It was considered best not to let the food become well or overdone; for it was believed that food lost strength in the cooking, and that the longer it cooked the less nourishing it became.

A favorite kind of food for a long journey was made from meat that had been roasted on a frame over a slow fire, and finished drying in the sun or in the smoke of the fire of the lodge. It was more to be relished if mixed with tallow, especially with that of a bear; it was even more choice if maple sugar and pounded rice or pounded corn were added to the mixture.

#### FIRE.

The Ojibwas knew of two methods of making fire. One way was to spin the end of a dry stick, usually of cedar, in the socket of a dry block of the same wood; the stick was twirled by means of a bow, the cord of which went once round the stick; the top of the stick fitted into

the socket of another block; the top block was gripped with one hand and against the back of the hand was braced the chest, while with the other hand the bow was sawed parallel to the blocks, causing the stick to twirl; the live embers dropped into a lower trough where they ignited with the punk. The other method of making fire, and the one more common, was to strike one piece of flint against another; the tinder was preferably the punk of birch.

### CLOTHING.

Men and women wore much the same style of moccasin. The sole and upper of the ancient moccasin was of one piece. The seam at the back and down in front was gathered, and from this fact an attempt has been made to derive the meaning of the term Ojibwa. If the definition be true, the modern Ojibwa are not conscious of it; and it is only the older heads who can see a connection, but usually not till it is pointed out to them. The old moccasin had a top which fell down at the side and parted at the heel and instep; each flap was appropriately called an ear, and was usually decorated with porcupine quills, and later with beads; the "ear" was longer pointed in front. A thong through the top of the instep passed under the "ears" and went round the ankle.

In the instep of the modern moccasin is a tongue which runs half way down the foot, the lower part of which is generally decorated with beads. The top of the moccasin is usually double. One part of the top is like the "ears" of the old moccasin, and almost always is decorated with beads; and the other part is a gaiter which may extend half way up the knee, and is wrapped by a thong that passes through at the instep.

Leggins were worn by men and women. Those of men reached nearly up to the hip. They hung by a thong which passed from the top of the outside and went over the hip to the belt. The leggins of women reached barely up to the knee. They were held up by a garter at the top.

Men wore loose shirts. The sleeves of some extended as far as the wrist. There were three styles of breechclout: a cover between the legs with flap overhanging before and behind; a cover with no flap overhanging either in front or back; and a flap hanging down in front, but with no cover between the legs.

Women wore two general styles of dress. One was a loose single garment that opened at the neck and arms, and reached below the knees; it was worn with a belt. The other was a skirt with a short loose jacket. Often both styles were combined and multiplied according to the severity of the weather.

The women did their hair up at the back into a stiff slender knot. They covered it with a wrap which in turn was coiled tight with ribbon. The knot was round and often a foot long. From near the bottom hung loose ends of the ribbon which nearly touched the heels. The ribbon was of various materials; the most beautiful was of woven beadwork.

Robes for both men and women were of skins with the hair left on. By far the greater part of the clothing was made from the dressed skins of moose, deer, elk and caribou. To dress a skin it was first soaked in water alone, or in a preparation of brain boiled in water; it

was then stretched on a rectangular frame of four poles fastened at the corners with thongs. The frame was leaned against a solid support, and the hair was then scraped off by means of a short, round, thick-handled tool with a short blade lashed to the bent neck of the handle; it was worked like a hoe. The skins of small animals were frequently stretched over the smoothed surface near the end of a log. To give color the skin was smoked in a smudge, that of sumache was accounted among the best.

#### WEAVING.

The heddle loom was used in the making of belts and garters. The loom was carved from a solid piece of wood, or made from birch bark; the edge of the bark was braced between splints, usually of pine, to keep it from coiling. The shuttle was the finger or hand. In beaded work the needle became the shuttle.

A bag was woven with cord made from the inner bark of bass and cedar, and from the fibre of wild hemp. The work was done on a frame of two sticks set upright in the ground; the warp hung down and the woof moved from left to right around the sticks. Excellent bags with beautiful designs in geometric figures were made.

There were two general types of mat, one made of flag reed and another of the inner bark of cedar. Both kinds were made in the same way; they were woven from an upright frame of two poles with an horizontal pole connecting them at the top. The warp hung down from the pole, and the woof was worked from the top, moving from left to right. The mats were often colored with vegetable dye.

Basket work of a simple character was done by the Ojibwas of the south. The weave was generally of the plain checker work with the warp and woof of the same dimension. Common materials were the splints of ash and the osiers of willow and dogwood. The making of baskets was probably never very extensive among the Ojibwas. It was much easier and more convenient to fashion pails, boxes, and the larger vesels from the bark of the birch. And for the reason that it was possible to make a durable vessel from birch bark, the carving of wooden bowls was perhaps not on so large a scale as among the more southern Algonkins. But it was necessary to carve spoons, and this was done from various kinds of wood.

#### TRANSPORTATION.

Transportation on land was mainly by pack carried on the back. The tumpline of the skin of a moose or caribou passed over the arms and across the chest when the burden was light, but when it was heavy the line went over the forehead. The contents of a pack were in a bag, bundle, or in a wooden carrying frame, and the pack rested on the small of the back. The carrier rose with the pack on hands and knees.

The toboggan made transportation easier when the snow was on the ground and the lakes and rivers were frozen over. There was a saving of labor and time when dogs were used with the toboggan.

The snowshoe made travelling easier in winter. There were two general styles of snowshoe: one was long with the end transverse, or sometimes pointed and often raised; another was short and rounded,



and was called bearfoot because of the track it left in the snow. Both kinds were usually netted with sinew and buckskin. Sometimes the "bearfoot" snowshoe was netted with bark.

Transportation by water was done with birch bark canoe and paddle. A canoe sixteen feet long was regarded a big canoe. It was built on a cedar frame of long horizontal slats between the ribs and birch bark. The ribs were of a single piece, and went up under the gunwale. The bark was stitched with spruce root and gummed with pitch. It was usual for a canoe to have five thwarts: one near each end, two towards the middle, and one at the centre. The gunwale was wrapped tight with spruce root.

The Ojibwas south of the Straits of Mackinaw used a dugout canoe made from the single trunk of a tree.

### GAMES.

The Ojibwas found amusement in a great variety of games. The men played a rough, strenuous game of ball which has since been borrowed by the white man and developed into the sport now called lacrosse. The ball was a wrapping of cord, and was covered with buckskin gathered at one point. Frequently the ball was wooden and had a hole at opposite sides to make it whistle when going through the air. The ball was picked up from the ground, caught on the fly, carried on the run, and thrown by the use of a stick with a small net pocket at the end. The handle and the pear-shaped frame of the pocket were of the same piece. The pocket was of buckskin netting. The game was played between two opposing sides, and a score was made when the ball passed through a wicker goal from the field. There were two goals, one at each opposite end of the field. A less frequent kind of goal was a pole standing in the centre of the field. To score it was necessary to hit the pole with the ball.

A noisy variation of the game was played by women. In place of the stick with a net pocket was a plain, straight stick; and instead of the ball was a small, double sand-bag of buckskin.

There were several forms of the throwing stick, and the object sought for in them all was distance. Bets were won and lost on a throw, not only among the players, but among the people who followed looking on.

And then there were many games where the element of chance prevailed, such as in the various forms of the moccasin game, and in the different ways of playing with dice.

Just as everywhere children played they were big. The girls fondled dolls and copied the activities of their mothers and big sisters; and the boys acted in play the parts of men and early fell into the ways they were to pursue in later life.

### WEAPONS.

The Ojibwas were hard fighters. They beat back the raids of the Iroquois on the east and the Foxes on the south, and drove the Sioux before them. The plain bow and feathered arrow was one of their most effective weapons. Hickory and ash were common materials for the bow, and a wrist guard of buckskin kept the rawhide cord from cutting. Arrows were generally of dogwood, but they were also

made from other kinds of wood. For the right-handed, the arrow rested on top of the left hand and on the left side of the bow; for the left-handed the arrow was on the other side of the bow. The release was generally from the thumb and forefinger, and the cord was pulled back by the next two fingers.

The smashing weapon at close quarters was a war club with a knob drooping over at the end. Frequently a blade with two edges projected from the knob, turning the weapon into a kind of pickax. The flat "rabbit hind leg" club was mainly a ceremonial object.

#### PICTURE WRITING.

The Ojibwas made use of rude pictures drawn on birch bark to express thought. The pictures in most instances were realistic representations, and they were sometimes symbols of an object, an idea or a group of ideas. Their essential function was to help the memory, for by a single sign one was able to recall the words and the air of one or more songs. And by arranging the signs in a consecutive order one could recall the incidents of a hunt, or remember the episodes of a myth. They also served as a means of intercommunication, but this was a less frequent function. It was possible only when the signs conveyed the same meaning for more than one individual, and this was not always the case. The pictures were regarded with a sincere feeling of reverence, and it was believed that they were endued with magic power. Hence it was common to use them as charms to ward off danger and disease.

#### RELIGION.

There was a firm belief in a cosmic mystery present throughout all nature; it was called *manitou*. It was natural to identify the *manitou* with both animate and inanimate objects, and the impulse was strong to enter into personal relation with the mystic power. It was easy for an Ojibwa to associate the *manitou* with all forms of transcendent agencies, some of which assumed definite characters and played the rôle of deities.

There was one personification of the cosmic mystery, it was into an animate being called the Great Manitou. There was no tangible description of the divinity, but it was gathered from implied statement that the being was human and had the mental and physical attributes of a masculine character. It is possible that the influence of Christian missionaries may have had a good deal to do with the creation of the personification; for in the Ojibwa mind there is no difference between the Great Manitou and the God of the Christian missionaries; furthermore, it is common to associate ethical ideas with the personification. In the records of the old Ojibwa life ethical ideas were not necessarily connected with the cosmic mystery. For instance, a man married a woman from another clan not because he felt a conscious desire to act in accord with the *manitou*, but because it was the custom; the test of his morality was the care he took to conform with the custom.

The mythology of the Ojibwas is rich in characters, and a list of the deities is by no means short; a few of them may be mentioned:—

The great character of Ojibwa mythology was *Nānabuco* (*Nānabushuo*), who was of miraculous birth. While yet a youth he became

the creator of the world and everything it contained. He became the author of all the great institutions in Ojibwa society and was the founder of the leading ceremonies. Another divinity was the lord of the spirit world. Among some Ojibwa he was an elder brother of Nānabuco; among others he was a nephew that had been a wolf before his death at the hands of the water manitous. The giant Macos (Mashos) was lord of the Great Lakes. He had only to tap his canoe and in an instant he was half way across the water of Lake Superior, which the Ojibwas of the north shore are fond of calling the Ojibwa sea. Another giant, Windigo by name, was a malicious monster who found delight in roaming about in search of men to devour them. Four great deities dwelt at the four ends of the earth, and each had his own peculiar power and office.

There were other transcendent agencies ranging all the way from definite personifications to forces that shade off into inarticulate spirits. In the less definable group are classed the forces of the material and spiritual worlds, whether animate or inanimate, whether human or non-human. But whether or not the forces expressed, or lack articulate description, they are all alike in that they were endowed with the common mystic property; they are unlike in so far as they possessed the property in varying degrees, and it is this difference of possession that make them manitous of a high or low degree.

#### RELIGIOUS PRACTICES.

There were four kinds of practices which wrought a deep influence upon Ojibwa life by reason of their intimate association with the religious beliefs of the people. The practices were that of healing the sick, the *wābanōwiwin*, the *tcīsa'kiwin*, and the *midēwiwin*.

In the first office one sought to heal the sick by means of medicine and by the exercise of magic. The medicine consisted mainly of roots and herbs and was often administered after the chanting of sacred songs. In another way the healer sought to accomplish his purpose by the use of a rattle and with some short, round, slender bones. He put the bones one by one into his mouth, and, so it is said, swallowed them to find the cause of the disease. He worked the rattle about over the patient, and after a time spat out the bones into the palm of his hand. A great deal of faith was placed in the successful healer. It was believed that the disease was due to the malignant effect of some mysterious force, and that it was possible to get rid of the effect of the force by the use of magic. The herbs, roots, bones, rattle and songs were held to be endued with the mystery, and so were the means of driving out the cause of the disease.

In the *wābanōwiwin* a person showed how deft he was in sleight of hand performances, how good he was at handling fire without being burned, and how skilful he was in all sorts of tricks. It is said that this same person dealt in witchcraft and was therefore to be feared. Songs went with the *wābanōwiwin*, and they were sung to the beat of the hand-drum. The singing was done at night, the time when the strange performances took place. Anyone could go into the lodge to hear and to see after paying a small fee like a handful of tobacco.

A person who practiced the *tcīsa'kiwin* claimed to have the power of prophecy. He foretold if the sick would recover; if a journey would be prosperous; if a raid would end with successful issue; where



game could be found in abundance. He told whether distant friends or relatives were yet living; what was going on among a far-off people; if a witch was in the community or far away. This oracular speech was given from a cylindrical lodge open at the top. The sway of the lodge to and fro as if beaten by violent wind was taken as a propitious sign by the faithful who stood outside. The mingling of strange voices heard above the lodge was regarded as the utterances of manitous. It is said that the great turtle was the leading manitou of this office. Nobody had so much influence as one who did the *tcisakiwin*.

There were two general forms of the *midêwiwin*. One form was individual and without public ceremony and was concerned with divination and with the use of magic applied particularly to the getting of food. The other form was social, with a society of men and women who were bound together by vows of secrecy. It had formal ceremonies that were conducted with an elaborate ritual. Entrance into the society was by initiation after a period of instruction in the knowledge of mysteries. The payment of a fee went with the initiation; it was in the form of tobacco, food, and clothing; and the size of the fee depended much upon the wealth and social standing of the individual and upon his personal relationship with the tutor. The social side of the *midêwiwin* was by no means free from the practice of magic, but its special function was concerned with life after death. It was believed that the soul followed a path to go to the spirit world, and that the path was beset with dangers to oppose the passage of the soul; but that it was possible to overcome the obstacles by the use of formulas which could be learned only in the *midêwiwin*.

It was believed that man went through life with more than one personal soul, and that one of them remained with him after death. It was thought that every living creature possessed a soul, and that to get control of the soul made it possible to get control of the possessor of the soul. It was on such a theory that the Ojibwas hunted for game.

## 5. THE IROQUOIS.

BY DAVID BOYLE.

Although much has been *written* regarding the origin of the Iroquois as a people, we *know* absolutely nothing. It has been claimed that they came from west of the Mississippi; from the southwest—perhaps Kentucky or Tennessee—is meant; and it is asserted that their ancient seat was on the north side of the St. Lawrence, somewhere below or north of the city of Quebec. It will be observed that in each case, the crossing of a large river is involved, but it is tolerably safe to say that we shall never be absolutely certain what river that was. When there is no literature, tradition is utterly unreliable concerning matters of this kind, and often in others.\* Tradition

\*“Our Indians of the Northern Department have no chronicles, no annals, no written monuments, nor record of any kind whatever. They do not know even their own or their children’s ages, or did not, until our arrival amongst them.” Sketch of the Northwest of America by Mgr. Tache, p. 119, 1868.

The Indians referred to here as being of the “Northern Department,” were those of what we now call our North West, and it is quite safe to regard the statement as of general application.

tion may, and often does, contain statements based on fact, but the fact is generally unascertainable, unless we have similar information from other quarters with which to make comparisons. In process of time the statements become distorted, and there is seldom any method, or any means by which it is possible to straighten them. The Indians themselves, in such a case as the special one under discussion, can do nothing to assist. Philology has failed to afford any satisfactory clue, notwithstanding a recent claim that some kinship has been discovered between the language of the Iroquois and that of that Dakota.\* This, if substantiated, would lend color to the western origin theory, unless it could be shown that the Dakotas had left the main stock in the east, but the weight of opinion is in favor of the theory that the Iroquois came south-west from the north shore of the lower St. Lawrence.† The principal authority for the story of the Lawrencean origin is David Cusick, a Tuscarora, of whom Horatio Hale said "His confused and imperfect style, the English of

\*Dr. Brinton refers to the now extinct tribes of Virginia as "a fragment" of the Sioux or Dakotas.

When in Washington four years ago, I was introduced to a well educated Dakota, who was, I think, connected with the Smithsonian Institution, as an interpreter. I mentioned the matter to him just as I had read about it, but he ridiculed the idea. This, however, does not prove anything, except that there would not seem to be even a tradition among his people that they had ever come from the Iroquois, and I know of no tradition among the Iroquois that the Dakotas ever separated from them. Even tradition would not be proof in matters of detail, but might mean something in a general way.

†Mr. James Mooney, an unusually careful and authoritative ethnologist, very concisely sums up the case as it has hitherto presented itself, and met with general acceptance.

"Tradition and history alike point to the St. Lawrence region as the early home of this stock. Upon this point all authorities concur. Says Hale, in his paper on Indian Migrations: 'The constant tradition of the Iroquois represents their ancestors as emigrants from the region north of the Great Lakes, where they dwelt in early times with their Huron brethren. This tradition is recorded with much particularity by Cadwallader Colden, Surveyor-General of New York, who, in the early part of the last century, composed his well known "History of the Five Nations." It is told in a somewhat different form by David Cusick, the Tuscarora historian, in his Sketches of Ancient History of the Six Nations, and it is repeated by Mr. L. H. Morgan in his now classical work. The League of the Iroquois, for which he procured his information chiefly among the Senecas. Finally, as we learn from the narrative of the Wyandot Indian, Peter Clarke, in his book entitled 'Origin and Traditional History of the Wyandots,' the belief of the Hurons accords in this respect with that of the Iroquois. Both point alike to the country immediately north of the St. Lawrence, and especially to that portion of it lying east of Lake Ontario, as the early home of the Huron-Iroquois nations.' Nothing is known of the traditions of the Conestoga or the Nottoway, but the tradition of the Tuscarora, as given by Cusick and other authorities, makes them a direct offshoot from the northern Iroquois, with whom they afterwards reunited. The traditions of the Cherokee also, as we have seen, bring them from the north, thus completing the cycle. 'The striking fact has become evident that the course of migration of the Huron-Cherokee family has been from the northeast to the southwest—that is, from eastern Canada, on the Lower St. Lawrence, to the mountains of northern Alabama.'—Hale, Indian Migrations.

"The retirement of the northern Iroquoian tribes from the St. Lawrence region was due to the hostility of their Algonkian neighbors, by whom the Hurons and their allies were forced to take refuge about Georgian Bay and the head of Lake Simcoe, while the Iroquois proper retreated to Central New York. In 1535 Cartier found the shores of the river from Quebec to Montreal occupied by an Iroquoian people, but on the settlement of the country seventy years later the same region was found in possession of Algonkian tribes. The confederation of the five Iroquois nations, probably about the year 1540, enabled them to check the Algonkian invasion and to assume the offensive. Lin-



a half-educated foreigner, his simple faith in the wildest legends, and his absurd chronology, have caused the real worth of the book, as a chronicle of native traditions, to be overlooked."\* Notwithstanding this opinion, Dr. Hale saw fit to credit Cusick with general truthfulness respecting the movements of the Iroquois until they reached what is now northern New York State, at the beginning of the 17th century. It was not long after this that they came into contact with the French, since which time the doings, of not only of the "Five Nations," but of their congeners the Hurons, the Attiwandarons or Neutrals, the Eries or Cats, the Tuscaroras, and the Andastes or Conestogas, have become historic, so that little need be said here regarding them, after this occurred.

But it may be worth while to revert to the traditional origin of the people, according to Cusick (1826). There is absolutely not a word of proof, nor can there be, in the very nature of things, confirmatory of his statements.\*

It is almost certain that a people removed from its ancestral seat will, for many centuries, betray evidences in language, as well as in customs, of its former long-continued existence under different conditions, yet nothing of the kind has ever been noted among the Huron-Iroquois to show a former, long continued residence away down near the Gulf of St. Lawrence, or even between the river and Hudson Bay. Not a single superstition or example of their folklore shows that any association ever existed between them and the Eskimo, who must have been their neighbors, either occasionally or permanently, at such a time. Their tales contain no references to the moose, or to fauna of the sea such as the whale† and porpoise which frequent the gulf; yet one would suppose that all these animals, on account of their size, if for no other, reason, would have found place in the mythology of people who originated on the north shore of the river, below Quebec. On the contrary, we do find among the Huron-Iroquois almost affectionate mention of the "three supporters," or the three sisters—maize, beans and squashes, none of which grows successfully, if at all, so far to the north-east, and reference, to which, points rather, either to the present places of abode, or to some more western or southern region. In confirmation of this, we have the additional facts that the pagan Iroquois yet maintain the "Green Corn Dance,"‡ the "Husk Mask Dance" and a secret society known as the Husk Mask Society."||

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guistic and other evidence shows that the separation of the Cherokee from the parent stock must have far antedated this period."

As a summary of the bare assertions made by various "authorities," to propagate, and establish the Lawrencean fabrication, the foregoing is excellent. Mr. Mooney does not express his own belief in it otherwise than as any of us might do in a general way, without personal investigation, and simply depending on the accuracy of those who professed to have given some attention to the matter.

\*For an analysis of his story, see p. 150.

\*Although it is extremely absurd to mention the names of George Buchanan and David Cusick in any connection, one cannot but be reminded here of what a critic has said respecting the introductory portion of Buchanan's History of Scotland. "It is nothing but a tissue of fable, without dates or authorities, as, indeed, there were none to produce." Cusick made his own dates.

†Frequent references to whales, moose, caribou and even smaller animals are found in the myths of our Atlantic Coast Indians; e.g., "He put his bow against the whale" . . . Legends of the Micmacs, by Dr. Rand, p. 285.

‡Ontario Archæological Report for 1898, pp. 124-6.

||The same Report, pp. 163-4.



It may be asserted that there is nothing at all improbable in the belief that such ceremonial associations have originated since the removal of the people to a corn (maize)—growing part of the country, but associations of this kind, connected as they always are with religious usages—being, in fact, the chief outward manifestations of primitive forms of religion—why, it may be asked, is there not even a hint remaining among the Iroquoian people, of the dances indulged in by them when they lived in a higher latitude and under altogether different conditions? Ceremonies of this kind occur at least annually, sometimes oftener, so that the performance of them is less likely to have become forgotten than that of a migration, but according to Cusick and those who accept his statements, whether wholly or in part, we have a circumstantial and highly improbable story of one of a series of movements without a vestige of corroborative evidence. It may be added that even if such a movement ever took place, it was not by any means a flight, but must have occupied many years, and was therefore less likely to impress itself on the aboriginal mind as an *event*.

But where tradition has to be reckoned with, it is sometimes possible, and nearly always profitable to compare stories that have originated in different quarters; and experience has taught us that when the origin, or even the early history of a people is concerned, that people is not, itself, necessarily, the best authority, and a similar affirmation may be made regarding even the most intelligent representative of any people. This is notorious.

Besides the doubt that must ever attach to the lower, north-side-of-the-St. Lawrence theory, we must consider what is of quite as good authority, namely, the stories of those who were the neighbors of the Huron-Iroquois; stories compelling us to conclude that, wherever the latter came from, they had been on the south side of the St. Lawrence for many years before the date usually assigned to their appearance there, if we may trust the frequent mention of the "Mohawks" or Meg'weks or Kwedecks in a merely incidental way, and not at all for the purpose of proving any statement to this effect.

Mr. Charles Godfrey Leland, and Prof. John Dyneley Prince give the weight of their authority to the statement of a correspondent,\* that "In former days the Wabanaki (Abenaki) nation, the Indians called Meg'wek, or Mohawks, and other members of the Iroquoian six nations were wont to wage bloody and unceasing warfare with one another. The bitterest foes of the Wabanaki were undoubtedly the Meg'wek or Mohawks, who on the slightest provocation would send bands to harry them and destroy their crops."

Elsewhere the same scholarly writers say the Mohawks also made raids on the Passamaquoddies and on the Penobscots,† and this must have been when as we are told elsewhere, "The Mohawks and Micmacs both once inhabited these lower Provinces," and "When they quarreled and fought" until "ultimately the latter drove out the former,‡ the first statement being seemingly confirmed in another legend,

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\*Kuloskop The Master, by Charles Godfrey Leland, and John Dyneley Prince; introduction by Professor Prince (p. 24), quoting from manuscript of Louis Mitchell relating to conditions previous to the coming of the Europeans. †P. 27 and p. 28 respectively, in the Introduction of Micmac Indian Legends.

‡Andrew Paul, in Dr. Rand's Micmac Indian Legends, p. 139.

where it is stated that, "On the two opposite banks of the Restigouche, near its mouth, were two towns, one inhabited by Micmacs, and the other by Kwedeches. They were at peace with each other, and frequently attended each other's festivals."\*

It was not in the nature of things that these two peoples could live very long on neighborly terms, and the legend in all probability is an enlargement of some ancient statement respecting a time during which the "Nations" were on good terms for a short period; possibly, indeed, when each was feigning friendship, for future vengeful purposes, a belief we are warranted in holding in connection with such an opening as the following sentence to Rand's Legend XV: "This is a tale of the wars between the Micmacs and a tribe of Canadian Indians, called by the former Kwedechk."†

So far there is not a word said as to the time when the Mohawks made themselves "at home," in the Maritime Provinces, either permanently, or temporarily. If in the former way, they probably occupied the interior of the country, because, as far as we know them, the Huron-Iroquois were rather a land-loving than a water-frequenting body of people. We have no such records of their canoeing skill as we have respecting that of the Ojibwas and of other branches of the Algonkin stock. But they were expert archers, and, as such, are often mentioned in the legends. The bow and arrow, however, they gave up very soon after the arrival of white men in the country. A few references to these weapons, therefore, would lead us to suppose that, at the very latest, the traditional events must have happened shortly after the date of European settlement, but the general tenor of the tales indicates a time long antecedent to any knowledge of the white man, even by hearsay.

It would be easy to quote numerous incidental references in these legends to the Iroquois, under the names of Mohawks, Meg'weks, Kwedeches and Kwedechks, but this seems unnecessary, until we come to the stories of the great war, which led to the expulsion of those people from Acadia. The account of this event is given in Legend LI, thus: "In ancient times and during these wars, a celebrated chief arose among the Micmacs, whose name was Ulgimoo, of whom many strange tales are related. He drove the Kwedeches out of the region on the south side of the Bay of Fundy, they having been compelled to cross the bay in their flight from the enemy, and he urged them on farther and farther towards the north, finally driving them up to Montreal."‡ Here, "Montreal" means where Montreal now is. Similarly, another legend says the Mohawks found shelter at the lake of Two Mountains. The use of both names must be based on recently acquired knowledge. We are not obliged to assent to the expulsoy part of the story, but what do demand attention are the frequent incidental, or circumstantial references to the presence of the Iroquois in the Abenaki country, among not only the Micmacs, but among the Maliseets, the Penobscots and the Passamaquoddies, for the common enemy is mentioned in their traditions also. But we

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\*Rand's Legends of the Micmacs.

†Same volume, p. 126.

‡When the members of any Indian tribe or "nation" recount the deeds that occurred in the old-time wars, the reciters almost invariably accord the victory to their own people. We are not without similar examples among historical writers everywhere.

have something which, comparatively, at least, may be of a little value.

In Professor J. Dyneley Prince's translation of "The Passamaquoddy Wampum Records,"\* we read "Many bloody fights had been fought, many men, women and children had been tortured by constant and cruel wars, until some of the wise men among the Iroquois Indians began to think that something must be done, and that whatever was to be done must be done quickly. They accordingly sent messengers to all parts of the country, some going to the south, others to the east, and others to the west and northwest. Some even went as far as the Wabanaki. It was many months before the messengers reached the farthest tribes. When they arrived at each nation, they notified the people that the great Indian nations of the Iroquois, (Mohawk and others) had sent them to announce the tidings of a great Lagootwagon or general council for a treaty of peace. Every Indian who heard the news rejoiced, because they were all tired of the never-ending wars. Every tribe, therefore, sent two or more of their cleverest men as representatives to the great council."

Now, this either refers to the Hiawathan invitation, or it does not. If it does, it is remarkable (subject to correction) that in no tradition of Iroquoian origin, is there any reference to other than the five nations being concerned; as far as I know, it is not even hinted that others were invited,† and it is somewhat curious that *the* great chief who had made such a hitherto unheard-of proposal, was not mentioned, but this may not count for much.

If this peace proposition was other than that usually credited to Hiawatha, and if it preceded his, then he does not deserve so much praise as is lavished upon him by most writers.

Although, as Hale says,‡ that "In the mere plan of a confederation there was nothing new," and that "there are probably few, if any, Indian tribes which have not, at one time or another, been members of a league or confederacy," it would seem as if the event referred to was that of the formation of the Great League, the K'chi Sagem (Big Chief) of which lived at Kanawak (Caughnawaga, according to Cusick.§

Now, the remarkable thing about all this is the total want of allusion in Huron-Iroquois myth, or folk-lore, or historic tradition, to the Wabanaki peoples on the one hand, and the frequent references to the Iroquois as Kwedeches, Meg'wek, and Mohawks by the Wabanakis on the other. The former suggests a "conspiracy of silence."

What proof can be offered that before the publication of the Cusick story, a single person of the Huron-Iroquois stock ever asserted, or even hinted that the "priscan home" of his ancestors was

\*Appendix to Kuloskop the Master, New York and London, 1902.

†In course of time, the Tuscaroras, who were of the same kin, did come into the league, and so did fragments of some other tribes, as, for example, of the Tuteloes, and Saponies of Dakota lineage, and the Mississagas, Delawares, Nanticokes and Mohegans of Algonkin stock, but there is not a word about the Wabanaki, as represented by the Penobscots, Malisets, Passamaquoddies or Micmacs. The most easterly mentioned were the Mohegans, whose ground was on the lower reaches of the Hudson River.

‡Book of Rites, p. 21.

§Professor Prince's translation of the Passamaquoddy Wampum Records, Kuloskop the Master, p. 345. The mention of Caughnawaga is probably a recent interpolation.



some here on the St. Lawrence below Quebec or between it and Hudson Bay?\*" This ascribed seat of origin has always appeared to some of us as an absurdity, based wholly on the historic statement, that the French under Cartier met one band of Iroquois at Stadaconé (Quebec), and another at Hochelaga (Montreal). What even honest and intelligent members of the Six Nations, or of their congeners, may have affirmed at any time since Cusick's "tale" was published, is utterly valueless. The Jesuit missionaries, if they ever heard about the ancestral home of the Hurons and Iroquois having been so far north and east, or anywhere else, do not say very much about it, and such a situation is one of the last on the continent that scarcely anyone, even a wild and unreasoning theorist, would suggest, however it may have answered the purposes of a temporary home.

It has already been noticed that we do not find among the myths of the Huron-Iroquois even incidental or circumstantial references to the flora or fauna of a latitude so high as that of "between Quebec and Hudson Bay," while, on the contrary, we meet with just such allusions regarding other places far away to the south.

There are perhaps few white men living who are better able to enter into the spirit of the ancient Wyandots than Mr. Wm. Elsey Connelley of Topeka, Kansas. He has saturated himself with the folk-lore of those people, as it has percolated through their living representative "refugees" in his state, and he has such a thorough knowledge of the old tongue as now spoken, that he is not likely to be lead astray in his interpretations. In his volume, *Wyandot Folk-lore*† containing an Historical Review, and twenty-five folk-tales, there is much of interest, and not a little to confirm the belief that this, one of the very oldest (it is said) of Huron-Iroquois tribes had its "priscan home" not on, or near the St. Lawrence, although the author of the book holds a different opinion.

But Mr. Connelley's belief in the generally accepted theories is not held by him unreservedly, for he says: "It has been the opinion of writers upon the subject, that the Wyandots migrated from the St. Lawrence directly to the point (north of Toronto) where they were found by the French. Whatever the fact may be, *their traditions tell a different story.*" It is the purpose of what follows to re-enforce what has already been gathered from Micmac folk-lore by a few gleanings from Wyandot myth. A belief common to the Iroquois was that there were "Little People" whose Indian name, *Yagodinenyoyak*,

\*Since this was written, Dr. W. M. Beauchamp's very excellent History of the New York Iroquois has appeared, and on page 133 he refers to the statement of Nicholas Perrot, an old time French interpreter, that "The country of the Iroquois was formerly Montreal and Three Rivers. Their removal was in consequence of a quarrel . . . between them and the Algonkins. . . This explains why these [the Algonkins] also claim the island of Montreal as the land of their ancestors."

It explains more, for it indicates that which is most likely, considering all the circumstances, viz., that the Iroquois were aftercomers. In any event, it does not set up a claim that the locality was what Dr. Brinton called the "priscan home" of the Iroquois. It was the last home they remembered.

Much more to the point is the tradition mentioned by Lafitau, and quoted by Dr. Beauchamp, that "The Mohawks assert that they wandered a long time under the conduct of a woman named Gaihonariosk; this woman led them about through the north of America, and made them pass to a place where the town of Quebec is now situated."

Omitting the woman, a story of this kind might indicate some hazy reminiscences of the wanderings referred to in this paper, and of the expulsion of the Iroquois from Acadia by the Micmaes.

†Crane & Co., Publishers, Topeka, 1899.

means Stone-Throwers,\* who delighted in playing pranks, many of which were played with a good object in view. Two of these pygmies (they were always born as twins) killed the Witch Buffaloes in charge of the salt springs at what is now Big Bone Licks, Boone County, Kentucky, when the Wyandots lived there.†

In a case of this sort the reference to a particular locality differs from those of a similar kind that have already been criticised, because the point of the story lies in the fact that taking all the other circumstances into account, the event could not have happened anywhere else; for example, in a preceding tale‡ we have, "The Wyandots destroyed the caves of the giants. They then crossed the river and continued their journey. They came to the point where Montreal now stands." Montreal, according to my view, being mentioned simply because it fitted in with the now prevalent belief acquired, perhaps, even by an old but comparatively recent Wyandot, and based on the Cusick fabrication, perhaps, too, because Montreal may possess some charm as a large city in a foreign country, and we know that "Far away fowls have fine feathers," even to an Indian's eye. That this is an interpolation seems plain from the fact that near the beginning of the story, p. 84, we are told that "Ages and ages ago the Wyandots were migrating from a distant country. They were moving all the villages. In the course of their migration they came to a large river with exceedingly steep and rocky shores. This river belonged to some giants, and these opposed the crossing of the Wyandots." This description of the river corresponds rather with that of the Niagara than of the St. Lawrence. When the author says the Wyandots were making their way by Niagara Falls and Toronto to the Blue Mountains on the shores of the Nottawasaga Bay, they would not necessarily come near the Falls, and would not see any "steep and rocky shores" nearer than Queenston and Lewiston, nine miles from the lake shore trail, while by the southern trail they might very naturally be alarmed by the appearance of the river banks—precipitous walls from 100 to 150 ft. in height. The proof here is plain that the Wyandots, when passing the falls, were travelling northwards.

As another evidence of how the nature of a narrative may be modified quite unconsciously by lapse of time and consequent change of circumstances, the introductory story informs us that when the first people, who were Wyandots, as a matter of course, lived in heaven, the daughter of the Big Chief became ill, and the advice of the medicine man was, "Dig up the wild apple tree; [why wild?] what will cure her she can pluck from among its roots." The tree may have been of the kind mentioned, but it is just as likely that the reference to it arose from the narrator's own experience, or from that of some former story teller, gained in a more southerly clime. We may dismiss anachronistic and other slips of this kind, by merely referring to a remark made one morning very early to Mr. Connelley, by a Wyandot named Matthias Splitlog, who, on seeing a comet, said, "There is the chariot [!] of our Grandmother, The Little Turtle."

Story XVIII. "The Lazy Hunter," referring to one who wished to get married, has every appearance of unadulterated aboriginality, and in it are several references to the opossum which point clearly to a residence not between Quebec and Hudson Bay, yet in Story XXII the statement is made that the first knowledge of medicine was com-

\*Ontario Archaeological Report for 1898, pp. 164-5.

†Wyandot Folk-Lore, p. 89.

‡The Flying Heads, p. 85.



municated to the Wyandots by some bears that carried a man and his wife off to the Red Mountains in the north, wherever they may be. Still, it is not asserted that the Red Mountains were north of the St. Lawrence.

We have the authority of Dr. S. P. Rand for the statement that "the tradition among the Micmacs is that their fathers came from the southwest," and that "the old people up to a very late date spoke of their home in the southwest,"\* and this appears to me as a much more likely event than their coming from any section north of the St. Lawrence, where it is said they and the Iroquois had become bitter enemies, because of the common cause usually assigned in such cases, namely, a quarrel between two boys, one of whom was shot, hence, and so on. The southwest origin was claimed by all the Abenaki tribes, and a similar origin is here asserted for the Iroquois, partly because of the anomalous conditions associated with the Cusickan literary monstrosity, and partly because what I regard as evidence points altogether this way.

If we had never heard of the apocryphal origin, it would appear as if from what we now know, our theory might have taken some such form as this:

"The *priscan* home" of the Huron-Iroquois, as well as that of some other peoples who subsequently found their way northwards, was probably in Kentucky and Southern Ohio.†

For some reason it is quite clear that one great dispersal, or various minor dispersals of these people have taken place. The Huron form of the language being recognized by philologists as the *oldest* and, consequently, the purest, the Hurons may reasonably be supposed to have migrated first, or among the first, and to have isolated themselves in the Blue Mountain country, north of Toronto, where they found, or were afterwards joined by, the Ouendats (Wyandots), Petuns, Tionnontates, or Tobacco Nation, some of whose names naturally suggest a southern origin of the agricultural industry they carried with them, and established in their new abode.

Other migrations brought the Attiwandarons and Eries, respectively, to the north and south shores of Lake Erie, while what was then, perhaps, or afterwards became the main body, set out to the northeast, following, in all probability, the course of the Ohio as far as possible (either leaving behind them, or dropping by the way, bands subsequently known as the Cherokees,‡ Tuscaroras, Andastes, and, perhaps, some others now extinct), then striking more easterly until they reached Acadia, now New Brunswick and Nova Scotia, finding their way eventually to the north shore of the St. Lawrence river, or gulf—the latter, most likely, whence they eventually spread westwards to Stadaconé (Quebec) and Hochelaga (Montreal). From the latter point it would be but a short step to northern New York.

\*Micmac Indian Legends, Foot-note p. 110.

†The word Ohio itself lends color to our supposition. Horatio Hale in *The Book of Rites*, p. 176, discussing its meaning says, "It is derived from the word *wiyo* (or *wiio*) which signifies in the Seneca dialect *good*, but in the Tuscarora, *great*. It is certain that the Tuscaroras have preserved the primitive meaning of the word, which the Hurons and the proper Iroquois have lost." Otherwise, it would seem difficult to account for this name being given to the river—a name from the language of a people on the Gulf of St. Lawrence, or even in northern New York.

‡It is contended by some that the words Iroquois and Cherokee are mere variants.



Among other reasons for the conclusion that the Iroquois are most probably of southern origin, it should be mentioned that the Attiwandaron country, on the north of Lake Erie is, par excellence, the mound and other earthwork district of this province, and that next to it, but a long way behind it, in this respect, ranks the old abiding place of the Hurons near the Georgian Bay.\* In the whole double range of counties in southern Ontario, from the St. Clair and Detroit rivers on the west to Lake Ontario and the Niagara on the east, examples of such works are found. If this fact has any significance it is surely in the line of connecting those who made the earthworks with the people who formed similar structures farther south. Had the Iroquois come to this part of the country from the northeast directly, or indirectly, they would scarcely have brought with them this custom. It is surely, therefore, much more reasonable to suppose that they reached the district in question by entering it either from the eastern or western extremity of the lake after a northerly course, than to claim that subsequent to their wanderings with the main body of the "nation" or "nations" from the lower St. Lawrence, or from between Quebec and Hudson Bay, they took to the performance of what must have been to them a totally new kind of work; and on the assumption that the Attiwandarons formed part of the great migration by way of Acadia, this would be still more absurd. The conditions rather point to an independent movement before or after the northeast march took place up the Ohio Valley, unless, indeed, the separation happened on the way. In any event, the peoples were long enough apart to account for the north Erie branch being known to the Hurons as "those who speak not quite the way we do."

One might even be tempted to theorise a little in detail respecting the comparative periods when these migrations occurred, e.g., that the Hurons seceded first, taking shelter on the southern end of the Georgian Bay, Lake Huron; followed, perhaps, after a considerable interval, by the Wyandots; that those who settled on both Erian shores also set out before the main body, and that they who took possession of the northern shore preceded their congeners on the other side. Neither would it seem very wild to suppose that the enmity existing between the Micmacs and the Iroquois (if they were ever neighbors in their southern or southwestern homes) was the main cause of the northern migrations on the part of both—one party pursuing the other; indeed, it was probably for some such reason that all the secessions took place. But speculations of this kind are merely amusements. In the whole history of the Huron-Iroquois there are only a few—a very few—explainable statements worthy of recognition as facts, and it was an attempt to enlarge on these that led to the clumsy, stupid, and almost wholly incredible story from the pen of the Tuscarora, David Cusick, in 1826.

To record the movements and the doings of these people after the period when they came successively into contact with the French, the Dutch and the British, would be to write a very large portion of the history of Canada and the United States.

Fortunately for the British, the Iroquois as they were represented by those in the province of New York became our allies, not because

\*The hilly nature of what is now in the county of Simcoe, did not, perhaps encourage the construction of mounds, or render embankments necessary.

they loved us more, but that they loved the French and the Dutch less. They dearly loved a scrimmage, and for scouting purposes they were unsurpassed. Lithe, sinewy and enduring, habituated to hardship, and at home in the forest, they were able to perform tasks for the accomplishment of which white men, especially European white men, were quite unfitted, and it is somewhat doubtful whether they have ever received all the credit they deserved for the part they took in our military engagements.

Most of the present-day Iroquois reside on three reserves, viz.: in Tuscarora township, Brant county; at Deseronto, Tyendenaga township, Hastings county; at Caughnawaga, Laprairie county, opposite Montreal; and there is a large band of Oneidas at Delaware, near London, Ontario.\*

Many of these people farm in a simple way, a few somewhat extensively, but some of them act as guides to tourists and travellers "doing" the lake country.

Schools on all the reservations afford means of education, and a considerable number of the people can read and write. Some of the more intelligent natives are themselves teachers, and others act in various official capacities either privately or in the civil service.

Of the three thousand or so on the Tuscarora reserve, about two thousand profess christianity—Episcopalian, Methodist, Baptist and Seventh-day Adventist (!). The rest are pagans. At Deseronto they are Methodists; at Caughnawaga all are Roman Catholics; and the Kent county Oneidas are Protestants.

Those who desire to learn particulars respecting the history of the Canadian Iroquois cannot do better than consult the recently issued and very excellent volume by the Rev. Dr. W. M. Beauchamp, and published as Bulletin 78, by the University of the State of New York.

As a matter of course the doctor's book relates especially to the New York Iroquois, but the history of our own Iroquois who, indeed, form the main body, is so indissolubly connected with that of the former, that the story of the one, until near the close of the eighteenth century, is the history of both.

Iroquoian Tribes: The Iroquoian stock, taking the name from the celebrated Iroquois confederacy, consisted formerly of from fifteen to twenty tribes, speaking nearly as many different dialects, and including, among others, the following:†

Ontario, Canada: Wyandot, or Huron (see footnote, p. —; Tionnontati, or Tobacco nation; Attiwandaron, or Neutral nation; Tohotaenrat, Wenrorono. Iroquois, or Five Nations, New York: Mohawk, Oneida, Onondaga, Cayuga, Seneca. Northern Ohio, etc.; Erie. Southern Pennsylvania and Maryland: Conestoga, or Susquehanna. Nottoway, Meherrin?. Eastern North Carolina: Tuscarora. Western Carolina, Cherokee.

#### THE CUSICK STORY.

The following synopsis by C. S. Rafinesque, of Cusick's so-called "Chronology of the Onguys or Iroquois Indians" will give readers

\*The Oneidas here do not reside on a "reserve," as they have paid for the land, and exercise the full rights of citizenship.

†Compiled from Brinton and others.

some idea respecting the way in which the Tuscarora historian (!) handled his subject.

"Anterior to any date, the Eagwehoewe (pronounced Yaguy-hohuy) meaning real people, dwelt north of the lakes, and formed only one nation. After many years, a body of them settled on the River Kanawag, now the St. Lawrence,\* and after a long time a foreign people came by sea, and settled south of the lake.

"1st date. Towards 2500 winters before Columbus' discovery of America, or 1008 years before our era, total overthrow of the Towancas,† nations of giants come from the north, by the king of the Onguys‡ Donhtonha, and the hero Yatatan.

"2nd. Three hundred winters after, or 708 before our era, the northern nations form a confederacy, appoint a king, who goes to visit the great emperor of the Golden City, south of the lakes, but afterwards quarrels arise, long civil wars in the north, etc. A body of people escaped into the mountains of Oswego, etc.

3rd. 1500 years before Columbus, or in the year eight of our era, Tarenyawagon, the first legislator, leads his people out of the mountains to the River Yenonatateh, (now Mohawk) where six tribes form an alliance called the Long-house, Agoneaseah—afterwards reduced to five, the sixth spreading west and south. The Kautanoh, since Tuscarora, came from this. Some went as far as the Onauweyoka, now Mississippi.§

"4th. In 108, the Konearawyench, or Flying Heads, invade the Five Nations.

"5th. In 242, the Shakanahih, or Stone Giants, a branch of the western tribe, become cannibals, return and desolate the country; but they are overthrown and driven north by Tarenyawagon II.

"6th. Towards 350, Tarenyawagon III defeats other foes, called Snakes.

"7th. In 492, Atotarho I, king of the Onondagas, quells civil wars, begins a dynasty ruling over all the Five Nations, till Atotarho IX, who rules yet in 1142. Events are since referred to their reigns.

"8th. Under Atotarho II, a Tarenyawagon IV appears to help him to destroy Oyalk-guhoer, or the Big Bear.

"9th. Under Atotarho III, a tyrant, Sohanrowah, arises on the Kaunaseh, now Susquehannah River, which makes war on Sahwanug.

"10th. In 602, under Atotarho IV, the Towancas, now Mississagers, cede to the Senecas the lands east of the River Niagara, who settle on it.

"11th. Under Atotarho V, war between the Senecas and Otawahs of Sandusky.

"12th. Towards 852, under Atotarho VI, the Senecas reach the Ohio River,|| compel the Otawahs to sue for peace.

\*If they came from the south, according to what I regard as evidence, this river was more probably the Kenawha or Kanawha, which empties into the Ohio from West Virginia, opposite the city of Gallipolis.

†Cusick, elsewhere, says these were the Mississagers,—Mississagas?

‡Iroquois, Onguys means people.

§Algonkin tribes lying on or near the Ohio called it the Mississippi, as they regarded it the chief river in connection with the portion south of its confluence with the main stream.

||This, and the mention of Kentakeh (Kentucky) in the following sentence, show a glimmering of traditional knowledge respecting the south country.



"13th. Atotarho VII sent embassies to the west; the Kentakeh nation dwelt south of the Ohio, the Chipiwas on the Mississippi.

"14th. Towards 1042, under Atotarho VIII, war with the Nanticokes and Totalis (Tutelos).

"15th. In 1143, under Atotarho IX, first civil war between the Arians of Lake Erie, sprung from the Senecas, and the Five Nations. Here end these traditions."\*

This curious book, printed only about nine or ten years after the issue of Cusick's "Ancient History of the Six Nations," was no doubt a welcome addition to Mr. Priest's melange attributing all sorts of remarkable connections with the American Indians, involving Chinese, Japanese, Scandinavians, Welsh, Irish, Scottish, Italians, Romans, Egyptians, Libyans, Tartars, and, as a matter of course, The Lost Ten Tribes of Israel.

Rafinesque, who condensed the Cusickisms, was a man of some note in his day, although he did not stand in high repute among men of science.

### INDIAN MUSIC.

BY A. T. CRINGAN, MUS.B.

During recent years a commendable interest has been manifested in the collection and preservation in tangible form of folk songs of many different nationalities of widely varied degrees of civilized development. In England the "Folk Song Society" is actively engaged in searching out aged country people who can sing the songs peculiar to their district. Many of these have been transcribed from the lips of the "oldest inhabitants" to the printed page, which it would have been impossible to secure had the attempt been longer delayed. The Government of the United States has recently taken practical steps towards the collection of Indian music by appointing a specialist whose time shall be devoted to this important object. The Vienna Academy of Sciences is engaged in a comprehensive search for phonographs of languages and dialects to be employed in the study of comparative philology. "Already its collection includes popular songs of Gypsies and Arabians, favorite airs of Red Indian tribes, the idioms of Negroes and Malays, and so on. It is sending out voice-hunting expeditions every year, and its agents are now scouring Australasia, Roumania, Istria, and other localities." In Canada a satisfactory start has been made along similar lines. Eight years ago Mr. David Boyle represented to the Hon. G. W. Ross, then Minister of Education for Ontario, the desirability of securing a number of the songs peculiar to the Iroquois, and of publishing them in the annual "Archæological Report." As a result thirteen melodies of a most interesting nature were secured as the nucleus of a collection which now includes about one hundred typical Indian songs available in printed form. On the first experiment being made, the songs were sung by Ka-nis-han-don, who had been selected for this purpose, by the Indians of the Grand River Reserve, as the most competent exponent of their tribal songs. The attempt was made to note the melodies while being sung, but this was found to be a most laborious method alike for singer and writer. During subsequent meetings the songs were re-

\*From "American Antiquities and Discoveries in the West." By Josiah Priest, Albany, 1835.

corded automatically by means of the graphophone and examined at leisure by the transcriber. By this means it was made possible to secure an absolutely correct transcription of a much larger number of songs than could have been secured by the method first employed. Had the collection been undertaken at a later date many of the most interesting melodies would have been forever lost, as Kah-nis-han-don, who alone was considered able to give them correctly, has since joined the great majority in the "Happy Hunting Grounds."

In a study of Indian songs it must be constantly kept in mind that their transmission through successive generations has been entirely oral. The Indian of the past has never even thought of musical notation in connection with his tribal melodies. With other peoples, whose music possesses many features in common with the Indians, the case is entirely different. The Chinese, for example, possess a musical literature dating from 1,100 B.C. In addition, "from time immemorial Chinese music has been under the direct supervision of the State in order that the introduction of any tones contrary to law might be prevented." The Indian has likewise jealously guarded his songs against the introduction of foreign innovations, but, it cannot reasonably be supposed that the form in which they are now used is that in which they first were heard. Even civilized peoples, aided by the printer's art, have been unable to retain their songs in their original purity. Take such well-known examples as "Old Hundred," "God Save the King," or "Home, Sweet Home." Of these many variations from the original are to be found in editions published during the life of the present generation. A striking example of the modification effected by time is afforded in the case of our Canadian national song, "The Maple Leaf." At the reception to the Duke and Duchess of York, in 1901, two widely different versions were sung by the adult and children's choruses respectively, on the same afternoon. The method of transmission of the melodies of the Indians from one to another is simple, but effective. Each tribe possesses its own characteristic songs, sometimes numbering several hundreds. Among their braves there are usually a few singers who pride themselves on the excellence of their singing and the correctness of their melodies. These are the music teachers who are entrusted with the important duty of imparting their musical treasures to the younger members of the tribe, who may be fired with the ambition to excel in song as in the more arduous activities of their national life. Many of these Indian musicians display a phenomenal capacity for memorization of speech and song. In company with Mr. Boyle I had, several years ago, an exceptional opportunity of witnessing a most remarkable illustration of the extent to which this power has been developed. At the ceremony of "Burning the White Dog," which we were permitted to attend, the headman (Kah-nis-han-don) had to recite a large number of set speeches and songs, peculiar to the ritual, occupying over two hours in delivery. During this time he was almost constantly engaged in singing or speaking, yet no noticeable halt for a word was ever made. Throughout the entire ceremony he was closely observed by the onlookers, many of whom were equally familiar with the ritual, still, we were informed that every note and word had been rendered with absolute correctness.

With the Indian, music is something more than a mere amusement. It is associated with every phase of his life and plays an im-

portant part in the ritual of each of his many ceremonies and feasts. He has songs associated with the conferring of a name upon his infant son, songs adapted to the various games in which he delights from infancy to old age, songs to aid him in wooing the dusky maiden of his choice, to cheer him on his long and arduous excursions when on the hunt, or to inspire him with courage when engaged in deadly conflict. Should he desire to intercede with the Great Spirit for bountiful corn harvests, or to return thanks for such blessings already received or for success in battle, he finds in song his most potent means of expression.

A careful analysis of the Iroquois songs already secured reveals many striking peculiarities of rhythm and tonality. As the trained musician can readily recognize the distinguishing characteristics of the representative masters of the German, French, Italian, English, Scottish, or Slavonic schools of composition, so, also, may he recognize the music of the Indians through certain rhythmic and tonal peculiarities of a clearly defined character. The music of the Indian, like himself, is decidedly unconventional. On listening to the songs which accompany any important ceremonial, one is apt to imagine that the music consists of a jumble of unconnected sounds, more harsh than musical, but this feeling is gradually dispelled as the ear becomes familiarized with the musical idioms, and the mind begins to realize their underlying sentiment. The manner in which the melodies are rendered has much to do with the confusion of mind inseparable from a first hearing. The Indian vocalist makes no pretension whatever to skill in the art of voice production as we understand it. His ideal of the quality most desirable in vocal excellence may be expressed in a single word,—loudness. The environments associated with the performance of his melodies are such as to make this quality absolutely indispensable. Many of the ceremonials, of which the songs form an essential feature, are conducted in the open air, to the accompaniment of the howling of the wind combined with the vigorous beating of rattles and drums. To be heard the singer is compelled to shout with the utmost lung-power, and he who best succeeds in this respect is acclaimed the premier vocalist of his tribe. No human voice could withstand the strain consequent on this extreme exertion, sometimes continued through several hours, and retain its musical qualities unimpaired. The extreme upper notes of the melodies are frequently sung out of time as a result which sometimes leads the uninitiated to conclude that the Indian uses a scale comparing intervals not found in the music of civilization. That this is not the case is proven by a close examination of the melodies already secured and published. So far, no melody has been discovered containing any tones foreign to the major and minor scales common to the music of all civilized nations. The peculiar tonal effect produced by Indian music consists, not in the addition of tones to recognized scales, but in the omission of some of the tones of which these consist. On listening to a number of characteristic Indian melodies, one may be pardoned should he conclude that they are based on the Pentatonic, or five note scale common to the music of the Hindoos, Chinese, Negroes and Celts. Many of them are really so, but others are proved on closer observation to be even more primitive in construction. In discussing the tonality of the Indian melodies, comprising the first group, secured in 1898, with Dr. Hugh Clarke, Professor of Music in the University of Pennsylvania, he expressed the opinion that "The Indians, in common



with other primitive races, had employed the Pentatonic scale for the simple reason that it avoided the use of the interval of the semitone which they probably found rather difficult to sing." In a number of the songs already investigated it is found that in addition to the tones which necessitate the use of the semitone, or minor second, those which entail the interval of the major second are also absent. If Dr. Clarke's contention regarding the minor second, to which the writer agrees, be correct, the same primitive reasoning may have applied to the use of the major second. This is only slightly less difficult of intonation than the former, but neither is quite so easily produced as are the intervals of the major and minor third, which, with the perfect fifth, constitute the common chord. That this simple combination of the first, third, and fifth tones of the scale formed the germ from which the earlier Indian melodies were developed is a conviction that becomes more conclusive as investigation proceeds. In a number of the melodies, considered by the Indians themselves to be the most ancient, no other tones than three comprising the Tonic Chord are to be found. This is sometimes major, sometimes minor, both being freely employed. The interval of the major second was probably first employed on the introduction of the sixth degree of the scale, which occurs in many of the more ancient songs as the single addition to the tones of the Tonic Chord. The addition of the second degree would have served the purpose equally well, but this is not found in any melodies unless in combination with the sixth. The addition of the sixth and second degrees completed the Pentatonic scale in both major and minor forms and would tend to familiarize the ear with the closer interval of the major second. In common with many other nations the Indian may have found this simple five-toned scale a sufficient means of musical expression for centuries before venturing on the introduction of the interval of the minor second consequent on the employment of the fourth and seventh degrees which complete the major scale. These must have been introduced with caution and the fourth undoubtedly preceded the seventh as it is frequently met with in songs which do not contain the seventh, while the latter is found only in combination with the former. The seventh, or leading note, is used very sparingly in the major mode, and in the minor mode its use is confined to a very limited number of melodies, chiefly those used exclusively by the women.

The rhythm of Indian music is in many instances exceedingly complicated. The conventional rhythms and four-bar phrases of ordinary music are ignored. Phrases of five and seven bars in length are employed freely, and of regular music cadences there are few. The Indian has no consciousness of their need, therefore, why should he use them? His melodies are not set to words arranged in stanzas of nicely adjusted metrical proportions which entail a musical cadence at the conclusion of each line. On the contrary, he ends his song at any convenient point, whether at the end of a musical phrase, or the middle is of no consequence provided it is concurrent with the finale of the dance or ceremony which it accompanies. His method of emphasizing the conclusion is much more emphatic, to him at least, than any conventional musical cadence could possibly be. This consists of a loud whoop usually commencing high in pitch and gliding throughout the compass of a complete octave. Syncopated rhythms are much in evidence in the majority of Indian melodies, and grace notes are employed with the greatest freedom.

## 6. THE BLACKFOOT INDIANS.

BY CLARK WISSLER.

The plains area of North America was inhabited by people dependent upon the buffalo. The flesh and by-products of this animal furnished them food, shelter and the common implements of life, thus characterizing a special culture known as that of the Plains Indians. In the Dominion of Canada the best representatives of this type are the Blackfoot, who formerly ranged from the Missouri to the Saskatchewan Rivers. In language they are Algonquin, and, presumably, came out of the wooded lake area to the east into the open country of the west, as did their kindred the Arapaho and Cheyenne, where they gradually adopted the culture of the Sioux tribes. At present they are confined to reservations in Montana and Alberta. One of the interesting problems in the ethnography of the Plains is the tracing out of the dissemination of culture among the various linguistic stocks that found their way into that region from time to time, and in this connection the Blackfoot are of special interest as one of the latest arrivals. My present purpose is, however, to give a brief description of this tribe that may serve as a characterization of Plains culture

## FOOD.

In former times the flesh of the buffalo and the deer were the chief food of the Blackfoot. Birds, fish, and other small game were eaten in times of necessity only. Frogs, reptiles and insects seem never to have been part of their diet. The habit of eating great quantities of meat seems to have survived, for though they can now obtain from the traders' stores flour, potatoes and other kinds of food, they prefer fresh beef, of which they consume a great deal. When one is travelling with these people he finds them always in discontent when there is no meat, even though there may be an abundance of other kinds of food at hand. The large game animals in this region beside the buffalo were the antelope which was found on the open plains, the elk and mountain sheep in the mountains and foot hills and occasionally in winter moose that wandered down from the north.

We have no information at hand as to the methods used in hunting these animals before the introduction of the horse. As they were obliged before this to hunt with spears and bows and pursue the buffalo on foot, it may be that the Blackfoot became a plains people after the introduction of the horse. We are not able to determine the time of the introduction of the horse, but know that they were well supplied with these animals before 1800, because Mackenzie, in speaking of the Blackfoot, says, "They are the people who deal in horses, and take them upon the war parties towards Mexico, from which they enter into the country to the south-east, which consists of plains."\* There are other facts, however, which seem to indicate the presence of the Blackfoot in the buffalo country before the introduction of the horse. According to their own traditions the buffalo and the antelope were usually killed by driving them over a cliff or ledge. The buffalo drive was practiced by all of the tribes of the plains and has been described by various writers, among whom is Father De Smet.†

\*Voyages from Montreal, etc., 1801, p. lxxi.

†West Missions and Missionaries. N.Y., 1859.

From all accounts it seems that the Indians of the plains usually erected an enclosure of brush and trunks of trees, into which the buffalo were driven and afterwards killed with arrows or spears, but the country in Montana and Canada between the Missouri and Red Deer Rivers is crossed by a number of streams running eastward from the mountains, along the courses of which are to be found steep, rocky ledges. Instead of making an enclosure in which to drive the buffalo the Blackfoot rushed the animals from the edge of one of these ledges, trusting to the rocks to kill a large part of the herd. However, they knew of the other method, and sometimes placed such an enclosure around the space below the ledge, but in every case they rushed the herd into the enclosure from the top of a cut-bank, or ledge. Several ledges on the Blackfoot reservation in Canada were pointed out to the writer as the locations of former buffalo drives. One of these is a ledge about 50 feet in height with rocks below. From the top, the prairie stretches away with an even surface so that one may approach the ledge without noticing it, until within 100 yards. Even then it looks like a small depression because the hills of the other side of the valley seem to be a continuation of the ground upon which one stands. From the edge of the cliff across the prairie extends a V-shaped row of stones. The Blackfoot claim that the leaders of the buffalo herd, when running, were always disposed to follow some line, mark or trail and that these rows of stones guided the herd toward the edge of the cliff. When buffalo were grazing within several miles of the drive, some young men would be sent out on foot to work quietly around the herd, causing them to move toward the drive. When they came near the lines of stones all the men of the camp came out and surrounded the herd, approaching them from the rear and side, rushed in whooping and shouting, causing the frightened animals to rush toward the cliff and to destruction. The writer made a superficial examination of the ground at the base of one of these drives and found the soil, to the depth of several inches, full of arrow points and other stone implements, from which it appears that these drives were used for a long time. Judging from the accounts of the old men, buffalo drives were seldom used after the introduction of horses and firearms.

The drive furnished the camp with a great deal more meat than was needed, consequently the bulk of it was dried and made into pemmican. The large muscles of the buffalo were cut up and hung upon poles to dry, after which they were taken down and pounded between stones until reduced to small particles. These were mixed with smashed choke-cherries, flavored by leaves and stems of the wild peppermint, and the whole packed in parfleches. Some buffalo tallow was melted in a spoon of sheep horn and poured over the pemmican in the parfleche, and as this cooled and hardened it sealed up the contents, protecting it from insects and moisture. During the butchering time after the buffalo drive the people ate the livers, the hearts and small intestines. The latter were cleaned, blown full of air, the ends tied, held over the fire until they burst, and then eaten. Pemmican was eaten from the parfleche without further preparation or used for making soup by boiling in water. The Blackfoot were also very fond of marrow and extracted it by breaking the bones with stone hammers.

Flesh of other animals, such as the antelope and elk, was usually eaten fresh and seldom made into pemmican. From statements of people now living, we infer that the antelope and the elk were hunted



for their skins rather than for their flesh. The mountain sheep was sought for its horns, which were used for spoons and dishes.

While the chief food of the people was the flesh of the buffalo, they ate at all times of the year, either alone or in combination with meat, various vegetable foods. The so-called sarvis berry (*Amelanchier alnifolia*) was the most plentiful in that region and was eaten fresh or dried and stored for winter use. There are several other varieties of berries that were used in the same manner, such as the buffalo berry (*Shepherdia argentea*), and the berry of a willow. The berries were usually gathered by the women in small bags of raw hide and poured on a skin of the buffalo or spread upon the ground in the camp and smashed by beating with sticks or stones. The pulp thus produced was dried in the sun and stored in raw hide bags. Berries with large pits such as the choke-cherry (*Prunus Virginiana*) were smashed with stones and treated in the same way. This method of treatment reduces the bulk of the fruit so that a great quantity can be stored in a small bag, which is an adaptation to the necessity of rapid transportation.

It seems that edible roots formed a considerable part of the food of the Plains Indians, but the most important of the food plants did not grow in the Blackfoot area. The kamas root used by the tribes west of the Rocky Mountains was accessible to the Blackfoot on the eastern slope, consequently during the kamas season the Blackfoot moved to the foot hills of the mountains, where the women were engaged in root digging. For this purpose a digging stick was used, which was nothing more than a straight, sharpened stick. The method of preparing kamas is the same as employed elsewhere, namely, roasting in a pit for twenty-four hours or more, after which the roots are spread in the sun and dried for storage and transportation. The prairie turnip (*Psoralea esculenta*), according to the statements of the Piegiens, is rarely found north of Sun River, but in former times the people made journeys to the south for the purposes of gathering these roots. They were dug with digging sticks, carried away in bags and stored without further preparation. A number of other roots seem to have been used occasionally and in times of famine. It should be borne in mind, however, that practically all of the vegetable food named above was never eaten alone, but as part of a stew or soup made of buffalo or deer meat.

There are no evidences that the Blackfoot ever practised agriculture as the means of increasing their food supply. While the climate of the region in which they lived was not favorable to agriculture, the presence of the buffalo and the ease of their capture made the practice undesirable. That the Blackfoot knew of agriculture and the methods of raising corn is certain, because their myths contain accounts of tribes who raised and stored this cereal and the narratives of the war-path mention the conquest of people who knew how to raise corn.

However, one plant was cultivated, a kind of tobacco used entirely for ceremonial purposes. This plant, according to Grinnell,\* is, when mature, about ten inches high, with a long seed stalk growing from the centre. This writer gives a brief account of the ceremonies accompanying the annual sowing of the seed. His account agrees fairly well with the information secured by the writer. It is interesting to note that there was no tending or care of the crop after it was sown,

\*Blackfoot Lodge Tales, 1903, p. 268.

for the whole tribe went on their annual migration and did not return until time for the harvest, when another ceremony took place. These ceremonies have been described by Maximilian,\* Prince of Wied, and by Sims, as observed among the Crow Indians.†

The gathering of vegetable food determined to a considerable extent the annual migrations of the Blackfoot, for while they followed the buffalo from place to place they arranged their journeys so as to bring them around to the localities in which the various vegetable foods were abundant and in season.

There is no evidence that the Blackfoot were ever acquainted with the art of pottery. They may have known how to make cooking vessels since the memories of persons now living fall short of the time when pots of brass and iron were introduced by the Europeans. However, there are traditions among the people that meats were sometimes boiled in a fresh skin, supported by four sticks, in which meat, water and hot stones were placed. This was a common method among the Indians of the Plains before the introduction of kettles. The most common method of cooking the meat of the buffalo was by boiling and the custom was then, as now, to keep the kettle over the fire continuously, so that any member of the family might eat when he so desired and so that a guest could be provided for immediately upon his entrance into the lodge. As previously stated, dried vegetable food was boiled with the meat, forming a part of the stew or soup. Meat seems never to have been roasted, except by hunters or war parties, and then only when there was no time for boiling. Grinnell gives an account of a method of cooking the eggs of water fowl in a pit by means of water and hot stones,‡ which is somewhat similar to methods employed by tribes west of the mountains.¶

#### CLOTHING.

While at the present time all of the divisions of the Blackfoot wear the clothing of the whites they formerly dressed in skins of antelope, elk and buffalo. The ordinary man's costume when in-doors consisted of a belt, gee-string and breech cloth.

When out of doors a pair of long leggings, moccasins and a loose shirt were added and over these wrapped about the person was a robe of buffalo or elk skin. It was not uncommon, however, for a man to go about the camp with no other addition to his in-door costume than a robe. In athletic contests, in battle and in chasing buffalo, the costume usually consisted of moccasins and breech cloth. The women wore loose dresses of elk or buffalo-cow skin reaching about half way over the knees to the ankles. They wore moccasins similar to those of the men and leggings reaching to the thigh where they were held in place by strings, or garters, and sometimes supported by cords attached to the belt, or waist cord. Robes were also worn by the women, and both men and women wore broad strong belts outside of their garments to which were attached knives and other useful or ornamental objects. The dresses of the women were usually made of two elk skins, from which all the hair except that upon the tail had been removed. In making a garment, the two skins were brought

\*Travels in North America, London, 1843.

†American Anthropologist, N.S., Vol. VI., pp. 331 *et seq.*

‡Blackfoot Lodge Tales, 1903, p. 207.

¶James G. Swan: Three Years at Shoal Water Bay.

together so that the extensions for the hind limbs overlapped each other, the tails coinciding. Leaving an opening between the tails long enough for the head to slip through, the two skins were sewed together along the upper edges of the leg pieces. At the bottom the two skins were sewed up at the sides to the point where the skin begins to come outward to the extensions of the hind limbs. Through these openings the arms were passed. When the completed garment is seen on a woman, the skin from the front limbs of the elks hangs down on each side almost to the ground while in front and behind the skirt scarcely reaches the ankles. Out from the shoulders and down from the arms to the elbows hangs a cape like extension, made by sewing together the skins of the hind limbs. The skirt, or that part of the garment below the belt is usually covered with strings of deer skin from four to ten inches in length, giving the whole a fringed appearance. The shirts of the men were made in the same way except that the tails of the animals were removed. The edges of the skin at the bottom and around the arm holes were often notched and fringed. While the dresses of the women did not have true sleeves, the shirts of the men were so arranged that the extension from the arm and in front of the shoulder could be held in place by bringing together at regular intervals the loose edges of the skin and tying them with strings, provided for that purpose, thus producing a kind of sleeve, open underneath. The leggings of the men were usually made of a single piece of skin with the seam at the outside of the leg. They were long and cut so as to fit the thigh and the hip, reaching almost to the belt at the sides of the body. The moccasins for both men and women were of the same general pattern. According to the information of the old people now living, moccasins were formerly made without soles and of a single piece of skin with the seam at the heel; the type of moccasins worn by the eastern Algonquin Tribes and the Athapascans. For a long time, however, they have used soles of raw hide with soft tanned skin for the uppers. Summer moccasins were made of skin from which the hair had been removed, while the winter moccasins were generally made of buffalo skin with the hair inside. The moccasins and clothing of children were modeled after those of adults; though as a rule children did not wear clothing until eight or ten years of age, at which time they were provided with small robes and moccasins, leggings, etc. Thread was made by drawing shreds from a piece of dried sinew, moistening it in the mouth, and twisting by rolling between the palms of the hands while one end of the thread was held by the teeth. The moistening of the sinew causes it to expand, and as the thread dries in the stitches it shrinks drawing them in tight.

The methods of putting together garments and sewing, described above, did not differ from those employed by other Indians of the plains, but each tribe practiced a few special forms of ornamentation so that it was possible to distinguish the work of one tribe from that of another. While at the present time the decorative art of the Blackfoot is decidedly inferior to that of the Dakota and the Crows, the writings of the first explorers of the North West give them the first rank. Catlin says that there was no tribe on the continent that dressed more gorgeously than the Blackfoot, unless it was the Crows. However, he saw no great difference between the costumes of the two.\* Maximilian also states that the costumes of the Blackfoot were

\*North American Indians, 7th Edition, p. 30.



highly pleasing in decoration.\* The shirts of the men were decorated with a band of quill work extending from the shoulder down the top of the sleeve, and another extending some distance down the breast and back. A similar band extended along the seam of the legging. The quills for these bands were usually worked upon a separate piece of skin and when completed, sewed to the garment in the desired place and it was not uncommon for the quill work to be removed from one garment and placed upon another. The distinguished men wore large circular designs upon the breasts of their shirts and similar ones upon the back. At present they maintain that this was a very ancient and original ornamentation devised by them, and while Catlin has drawn a number of portraits of the Blackfoot on the Upper Missouri, in which he represents these ornamentations as now made, Maximilian states specifically that the Blackfoot borrowed them from the Assiniboine. He says further that the Assiniboine wore leather shirts with a large round rosette on the breast, which is made from porcupine quills of the most gorgeous colors, and they often wear another piece of similar ornamentation on their backs.† Later De Smet testifies to this as a characteristic of the Blackfoot.‡

Distinguished men also wore fringes of white weasel skin along the seams of their leggings, sleeves and over the breast and back. They also wore head dresses of raw hide covered with strips of the same material, and often provided with a pair of buffalo horns placed in the position they bear to each other on the head of the buffalo. The man's robe was sometimes decorated with bands of quill work extending lengthwise.

The dresses of the women were formerly worked in quills across the breast, back and arm pieces in broad bands following the outline of the garment. After the introduction of glass and porcelain beads these garments were beaded in the same manner. The moccasins of both sexes were ornamented on the toes and the instep, by two kinds of designs, a rosette, and a curved design. According to the old people the latter is the more ancient. At the present time ornamentation in porcupine quills is exceedingly rare, beads having almost displaced this original material.

#### SKIN DRESSING.

As the Blackfoot depended almost entirely upon the skin of the buffalo and deer for clothing, and made no attempts at weaving, the dressing of skins was a very important industry. When the skins were first removed from the animal they were stretched on the ground, hair side down and held in place by wooden pins. The surface was then moistened with water, and the flesh and connecting tissue scraped away by means of a fleshing tool, an instrument shaped like a chisel with a loop at the top to engage the wrist. The scrapings obtained at this time were rich in fat, and were usually saved for making soup. It is a common incident in the mythology of these people for a poor person to beg for these scrapings. The skin, now

\*Travels in North America, p. 248.

†Travels in North America, p. 194.

‡Letters of Father De Smet, 1905, Vol. II., p. 523.

cleaned, is worked down to the desired thickness with an adz shaped tool made of elk horn, formerly tipped with stone but now with metal. By this process the hide is reduced to a uniform thickness throughout. When using this scraper the women stand upon the skin and stooping over hold it in both hands with the handle almost parallel to the surface of the skin. Shavings from an inch to two inches long are removed at each stroke. If the hair side of the skin is to be dressed also, it is turned over and the hair is scraped away with the same instrument. The next step in the process is to rub into the pores of the skin an oily substance made from the brains of animals, after which it is left to dry and the heat of the sun causes the oily matter to soak into the skin. After a time the skin is made wet with warm water and rolled up into a tight roll, after a while it is taken out and stretched to its original form by pulling with the hands and feet. If the skin is large, two or more women are required to perform this operation. The next and the last step is the drying process.

A rope of twisted thong is made into a loop and tied to a lodge pole. Then the skin is pushed through the loop and vigorously sawed back and forth in all directions. The friction causes sufficient heat to evaporate all the moisture and to evenly distribute the oil in the skin until it becomes soft and of a clean white color. It is then ready for use.

#### SHELTER.

The lodges, or tipis, of the Blackfoot were precisely like those of the Sioux and other Plains Indians, consisting of poles and covers of buffalo skin. The number of poles varied according to the size of the lodge, usually ranging from thirteen to thirty-two.\* As these people travelled a great deal in regions where suitable wood for lodge poles could not be found they had need of poles that could be easily transported, and cut them slender and straight, of pine or spruce varying in length from twelve to fourteen feet.† In travelling the smaller ends were fastened to the pack saddle and the butts allowed to drag in the rear of the horse. The lodges were owned by the women, who always put them up, took them down and attended to their transportation. The erection of the lodge was begun by tying three poles together, standing them up in the form of a tripod, one leg of which formed the post of the door, then laying the other poles on in order, passing around in the direction of the sun, and tying them at the top by a turn or two of the long free end of the cord with which the first three were tied; the cover was then spread out on the ground, and one pole fastened to its middle, by which it was raised, put in place and pinned together over the door by seven or more slender sticks. The lodge was made symmetrical by drawing out or pushing in the bases of the poles until the whole assumed a true conical shape, when the edges of the lodge were staked down with pins about eighteen inches long. The lodges varied a great deal in size ranging from eight feet to twelve in diameter and from nine to twelve in height. While there was always an opening at the top where the poles cross, through which the smoke of the fire could escape, the true smoke-hole was between the crossing of the poles and the door and was protected by two ear-like flaps, each held in place by a pole standing on the outside of the lodge. By moving these poles about.

\*Hector and Vaux, Trans. of Eth. Society, London, Vol. I.

†Blackfoot Lodge Tales, Grinnell, p. 199.

the smoke-hole could be opened and closed at pleasure, and the flaps so adjusted as to prevent the wind from blowing the smoke down into the lodges. While all these were characteristics common to the Indians of the plains, the Blackfoot had a few special ways of arranging and decorating their lodges.

The stakes were usually made of birch or choke-cherry wood and ornamented by cutting away the bark so as to leave four rows, or bands, near the top. The spaces between the bands were usually painted red. Inside of the lodge, opposite the door, extending half way around was a lining of buffalo or other skins, reaching upward to the height of four or five feet. This lining was usually decorated with long narrow designs running parallel to the poles of the lodge. The fire was usually a little forward of the centre of the lodge so as to bring it under the smoke-hole, and just back of the fire-place was a small altar made by scraping away the surface-soil to the depth of one or two inches, usually in the form of a rectangle, in the centre of which was a little mound upon the top of which incense was burned for religious purposes. Back of this, next to the wall and directly opposite the door was a space of two or three feet reserved entirely for ceremonial and religious objects and no one was permitted to stand on this spot or pass between it and the fire. The beds were arranged on the ground around the sides of the lodge, separated from the reserved space at the rear by back rests made of willows tied together with sinew and supported by tripods. While these back rests were used by other Plains Indians the ornamentation of the Blackfoot tripods was peculiar in that it was produced by cutting away the bark so as to leave designs in black and white. The intervening surfaces of the wood were sometimes painted.

The door of the lodge always faced the east, and the man of the family sat on the left, or the south side, nearest the back rest, next to him his wife and next to her the children or the younger members of the family. The other side of the lodge was reserved for guests or the unmarried adult sons of the family. The religious and ceremonial objects of the family, hung from the back wall or lay upon robes placed upon the ground in the space between the back rests, while personal property was tucked under the sloping sides of the lodge between the bed and the south side of the door. Among the Blackfoot it was regarded as very impolite to pass in front of a man when in the lodge and for anyone to pass between a distinguished man and the fire when he was smoking was a grave religious offence. For this reason male guests were given places near the back rest so that there need have been no occasion for anyone when leaving the lodge to step between the guests and the fire. Should there have been several guests they were usually given seats corresponding to their rank or the esteem in which they were held by the host. Should one of the guests have desired to leave the lodge he must either have passed behind those between himself and the door or else have taken the pipe from their hands and passed between it and the fire. If the guests were women unaccompanied by men they were given seats next to the wife of the family. As soon as a male guest entered the lodge, the host filled a pipe which he lighted and passed to him and he in turn after a few puffs passed it back to the host and so on.

Older people and especially widows lived in small lodges. This was apparently not from necessity but from choice, since it was regarded as a proper way of expressing their sorrow or condition in life.



## TRANSPORTATION.

Before the introduction of horses the Blackfoot travelled on foot, carrying burdens on their backs and making use of the dog-travois. The principal parts of the travois are two poles tied together near the small ends and held in position by a cross frame so that the whole resembles a letter A. The cross frame is made in two ways, as two parallel bars with a number of short cross pieces tied to them by thongs somewhat in the form of a ladder, or as an oval-shaped frame made by bending a flexible twig into a loop and netting across with thongs of skin, giving the whole the appearance of a netted wheel. Sometimes the two cross bars in the former type are joined by similar net work. The top of the frame rests on the dog's shoulders and is held in place by straps passing around his body in front of and behind his four legs, while the ends of the poles drag behind on the ground separated by the frame between them. When horses were introduced the travois was enlarged without change. At the present time the horse-travois is much used for hauling wood and supplies from the trader's stores. In former times the aged, the sick and young children were placed upon skins on the travois and protected from the sun or rain by a canopy of the same material. All the adults and the able-bodied members of the band rode horses on saddles of their own construction, made by stretching fresh skin over frames of elk horn or wood. According to Hector and Vaux the saddles and other riding gear of the Blackfoot were elaborately ornamented with quill work and beads.\* Formerly the only bridle used for horses was a long rope consisting of a single strand of buffalo skin, or several strands of the same material plaited, one end of which was looped and passed around the lower jaw of the horse, the loose end being held in the hands of the rider. Quirts were used by both the men and women, those of the women usually having handles of elk horn with lashes of raw hide, while those of the men had heavy wooden handles often elaborately carved and decorated. These had loops at the ends of the handles to go over the wrists of the riders. The travois was the property of the woman and all transportation of baggage was under her care. She usually made all transportation appliances, including the saddles of the men.

The people have no traditions of transportation by water, though they knew of people who did use canoes, and they seem never to have used the bull-boat, a kind of tub made of skins used by the Sioux and other Plains Indians. When crossing rivers the skin covers of lodges were folded into large dish-shape bundles, supported by cross pieces of wood, forming a kind of raft, upon which children, old people and baggage were placed and ferried across by women swimming at the side. It is not certain that the Blackfoot ever wore snow shoes for winter travel. Some individuals claim to have heard their ancestors speak of their use, but their information is too vague to be given much credit.

From the time of earliest contact with the whites the Blackfoot were noted for their wealth in horses. MacKenzie says:

"They are the people who deal in horses and take them upon the war-parties towards Mexico; from which, it is evident that the country to the southeast of them, consists of plains, as these animals could

\*Trans. of Eth. Society, London, 1861, Vol. I.

not well be conducted through an hilly and woody country, intersected by waters.”\*

Umfreville observes: “In their inroads into the enemies’ country they frequently bring off a number of horses which is their principal inducement for going.”†

That they were good travellers is evident from all accounts. We are told:

“They are real Bedouins of the prairies, having always parties on the move in every direction; making rapid journeys sometimes to the British, and sometimes to the American parts for the sake of gathering news concerning other Indians, or of the buffalo.”‡

As a rule the horses were the property of the men. The woman owned her steed, pack horses, etc., which were usually females, but the herd belonged to the man. The best horses were brought in at night and picketed near the lodges of their owners. During the day the herd pastured at will near the camp. The bringing in of the herd seems to have been left to the women. No system of branding was used, but each person knew the individualities of his animals so that he could recognize them at sight. Some owners had a preference for horses of one color and prided themselves upon being the owners of many white horses, etc. We have no evidence that conscious selective breeding was practiced or that castration was known.

#### WARFARE.

It is difficult to secure accurate information concerning the types of weapons used by these people before the introduction of fire-arms. From the examination of specimens of ancient and recent manufacture and information from the people themselves, the writer infers that there were two types of bow in use. One was cut out of a single piece of wood, straight in the middle for about two-thirds of its length, with ends curved. The other was a sinew backed bow, made of a single piece of wood backed with sinew and bent in a double curve. The arrows were made with a single shaft of willow, three-feathered and pointed with bone or stone. Some of the old men state that bone was more often used than stone. In the Blackfoot country two types of arrow points are found, one very small usually not more than a half-inch long, and the other long and slender, varying from one and a half to three inches in length. The Blackfoot claim that they never used these small arrow points, but that they were carried in by the Snakes and other tribes living beyond the mountains. Although the writer has no accurate data as to the relative number of the two types of arrow points that are now found in this region, his own observation indicates a great number of the smaller type and a great scarcity of the larger. A systematic examination of the ground around the old buffalo drives might settle this point satisfactorily.

War clubs with stone heads were used, but usually the stone was spherical instead of pointed like those of other tribes. The head was sewed up in a skin cover, an extension of which formed the sheath for a wooden handle two feet or more in length. The stone was not held rigidly to the handle, but hung loose, making it more effective when striking a blow. While the people made use of the

\*Voyages from Montreal, etc., p. lxxi.

†Present State of Hudson’s Bay, etc., 1790, p. 200.

‡Trans. Eth. Soc., London, 1861, Vol. II. Hector and Vaux, p. 257.

metal tomahawk and tomahawk-pipe introduced by the traders it is not certain that this type of weapon was known to the Blackfoot in earlier times. The more common form of war-club was a riding whip with a strong heavy handle, which served both as whip and weapon as necessity demanded.

Lances were used at one time, but seem long ago to have become ceremonial and conventional objects rather than weapons. However, the knife was a special object of veneration. The traditions make constant mention of a white stone knife which seems to have been a large leaf-shaped flaked tool of white flint-like material hafted in wood, bone or wrapped with skin. For the last sixty years or more, large double edged, pointed knives of metal have been carried by both sexes. In many cases these have come to have ceremonial attributes with more or less elaborate rituals pertaining thereto.

Since the introduction of horses into the great plains the wars of the Blackfoot seem to have been occasioned by raids for the capture of horses. According to traditions, such expeditions were made against the Snakes, Flatheads, Crows and Assiniboinés. These raids were common in the seventies, the last one of which we have certain information was made by several members of the Blood tribe who went to Ft. Belknap Reservation in Montana in 1887. They were discovered and killed by the Assiniboinés and Gros Ventre.

In horse stealing it was customary for a few individuals to go out alone. They frequently set out on foot and travelled by night until they located a camp, then watching their opportunity they crept around the horses grazing near the camp or inside of the camp itself, cut loose the tied horses and drove or led away as many as possible. This usually led to pursuit and running fights with various results. It was not uncommon for a whole band to go in pursuit of the thieves and trail them to their own camp, which naturally led to a contest between the two bands. Of course, it is to be understood that wars for revenge were sometimes undertaken, but these were less frequent than is often assumed and such revenge was usually in retaliation for loss inflicted upon the members of a horse-stealing expedition. In this way the practice of horse-stealing kept the Indians of the Plains in constant petty warfare. So far as known the Blackfoot never carried on a systematic military campaign against other tribes.

The Blackfoot practiced scalping, counted coup on the enemy, held the victory dance, kept tally of the exploits by symbolic designs, etc., like the other Plains Indians. However, they seem to have given more attention to the capture of horses and more honor to the successful horse thief than any other tribe. Going on the war-path for the mere sake of securing scalps, or the man hunt, was not a common practice among the Blackfoot.

#### SOCIAL AND CEREMONIAL ORGANIZATION.

The social organization has changed greatly in the last forty years, and has, no doubt, undergone a gradual change from a rigid clan system to a loose band organization since these people left the woods to roam on the plains. As it now stands they are composed of three tribal divisions, viz.: Northern Blackfeet, Bloods and Piegiens. There is a feeling among the Piegiens, at least, that the first is the original main body from which the others separated a long time ago.



In conversation they usually designate to which of these three a person belongs. The general independence of the three tribes is evident from the practice of holding separate sun dances, etc., but they have no traditions of actual intertribal warfare. Each tribe is composed of bands each with a headman, or chief. The members of the band look upon themselves as blood relatives, but discriminate between adopted members and blood relatives. Marriage is forbidden between members of the band as blood relatives, but not between the members as such. The husband marries into a band, and so lives with his wife's people to whose band the children normally belong. Men and women each have their individual property, according to convention, and, as a rule, the daughter inherits the mother's property, and the son the father's. When there are no children the property of each goes back to the nearest relations. The father usually exercises the right of naming the child.

Each of the three tribes was directed by a council composed of the heads of the bands, and this body elected one of their own members to serve as tribal chief. When camping together a circle was formed, each band of the tribe having a fixed place in the circle.

While it was common for a man to have more than one wife, he looked upon one of them as the true wife, and spoke of her as the one who sits next to him, because her place in the lodge was next to the head of the family. As a rule, every man of distinction had at least two wives. Adultery was not common, and women were punished for this offence by cutting off their noses, so that they might bear the mark of their shame all their lives. Divorce was not common.

The social, political and religious activities of these people were so interwoven that one of these subjects can not be discussed without treating of the others. In the first place, there were a number of societies possessing rituals and regalia appropriate to their functions. The most important societies are the so-called Age Societies, or Military Societies, the membership of which comprises practically all males over eight years of age. These societies were known collectively as the All-Comrads, and from one point of view might be considered as separate ranks, or degrees, of the same organization. At the present time these societies are well preserved among the Bloods, and are as follows: Mosquito, All Brave Dogs, The Braves, Black Soldiers, Raven Bearers, The Dogs, The Horns and The Catchers. The members of the first named society are boys about eight years of age, who pass from one society to the other in the order named above, until the highest is reached. There seems to be no fixed time for a member to pass from one society to the other, but, as a rule, this transferring occurs every four years after the rank of the All Brave Dogs has been passed. In former times there seems to have been a greater number of societies for young men, and a higher rank for very old men, known as the Bulls. This highest society seems to have passed out of existence a long time ago, and among the Bloods its functions are performed by the Horns.

While the women can not become members of these societies there is an adjunct of the Horns among the Bloods known as the Matoki, that is strictly a woman's society. In most cases the members of the Matoki are the wives of the members of the Horns and the character of the ceremony is such that they both seem to have had a common origin.

The various societies of the All-Comrads have religious functions, and especially the Horns, but there exists among the Piegans a strictly religious society known as the Crow-has-Waters. The significance of the term is that the members of the society have rights and formulas conferred by powers residing in the water upon Crow Indians who in turn transferred these rites to a few Piegans living among them. Some thirty years ago one of these Piegans returned to his people and introduced this society among them. Both men and women may be members, but the men seem to be the active members. Each member has a small bundle containing a few skins of birds or mammals to which belong short rituals containing a few songs.

About forty years ago a society for young and middle aged men, known as the Hair-Parters was introduced from the Gros Ventres among whom the same society is generally known as the Grass Dancers. This seems to be a social organization without religious significance.

The Black Tail Deer Dance is a religious organization bearing traces of the Ghost Dance Religion, and was introduced from the Kootenay about 1890. Its rituals are supposed to give its members power in hunting, but the ceremonies are characterized by trance and hypnotic phenomena.

There seems to have been a number of societies in former times that have passed out of existence or have been displaced by those introduced from other tribes. Among these were two peculiar organizations known as the Ghost Dancers and the Brave Dogs. The former was in no way connected with the Ghost Dance religion recently practiced by the Plains Indians. The latter seems to have been limited to a membership of two, and was characterized by the fact that these individuals were never permitted to turn back from a danger of any sort.

One of the most striking characteristics of the Blackfoot Indians is the possession of a great number and variety of rituals and bundles. These bundles seem to be entirely secondary, while the rituals, and especially the songs which they contain, are looked upon as the real point of contact with religious power. It is their belief that all rituals and songs were given to individuals in dreams or states of trance by the power of the universe appearing in the form of animals, and sometimes in the form of heavenly bodies. It is important to note that practically in every case the ritual was transferred to a single human being who in turn had the power to transfer it to others. Sacred bundles were often duplicated, while their rituals remained about the same. The most important are the Beaver Bundles, Medicine Pipes, Painted Lodges, Buffalo Rock Bundles, Sacred Turnips, and the Sacred Spear.

In some respects the Beaver Bundles are the most elaborate, while they bear the least resemblance of any to Plains culture. They contain the skins of animals, chiefly the beaver, and are accompanied by a ritual containing seventy to one hundred and forty songs, the number of which is usually a secret because of a taboo against counting them. Each bundle is owned by a single individual, who is supposed to know the ritual and to be able to perform it at any time.

There are a great number of special lodges with bundles and rituals, generally known as the painted lodges. There are, at least, forty-three of these, all of which have characteristic differences in the

number and character of their songs. Some of them confer power to attain success in war, others success in healing the sick, and still others success in promoting the welfare of the people. The decorations on the outside of these lodges are usually symbolic, and represent some phases of the ritual.

In addition to this large number of special medicine bundles, almost every man possesses one or more individual bundles, most of which have rituals composed of at least four songs. These individual bundles may be considered as war-charms, because they were used for that purpose in the past. When a young man became old enough to engage in military expeditions, he went to some noted medicine man and made application for such a bundle. The medicine man then transferred to him a small bundle containing skins or feathers of animals from which he claimed to have received a ritual and songs which he in turn taught the applicant. Then if the young man should prove very successful his bundle would be a special prize, and would be handed down from one generation to the other, often with additions to its ritual until it became a very important medicine object.

One of the most interesting points in the elaborate development of the ritual among the Blackfoot is the idea that the chief power of the ritual is contained in songs. The objects in the medicine bundle are of minor importance. Bearing in mind the fact that there were several hundred different bundles, all of which had a great many songs, and that all of these songs were different, we have a condition requiring a great amount of study on the part of the medicine men since they were supposed to know all the songs belonging to the medicines and to be able to perform their rituals. Thus the important part of a man's education was the learning of songs and rituals.

All the Indians of the Plains maintained a religious festival known as the Sun Dance, and while there were various minor tribal differences the ceremony had everywhere the same general characteristics. Sun worship, or the worship of the power in the sun, may be regarded as the chief element of their religion. The Sun Dance among the Blackfoot was peculiar in that the chief personage in the ceremony was a woman especially noted for piety and marital virtue. The Sun Dance was also the only ceremony in which the whole tribe participated. They came together in the summer, usually during the berry month, camped in a circle and proceeded to erect in the centre of the camp a peculiar circular structure of poles, which they speak of as the lodge of the Sun. During the interval of preparation the medicine woman feasts in her tent, and on the evening of the fourth day proceeds to the place where the Sun lodge is to be erected, and just at sunset all the poles are raised into place and the structure completed with all the dispatch possible. For several days following the chief medicine men of the tribe are stationed within this structure, where they receive and bless all the people who come to them. During this time the various All-Comrad Societies perform their rituals, and individuals who have been successful in war recount their deeds. When the Sun lodge is erected, offerings of clothing and other objects are made to the Sun. There seems to be an idea among these people that gifts of old worn-out clothing are often more acceptable to the Sun than anything else, because the Sun usually appears to mankind as a poor, poverty-stricken, helpless old man begging for a little cast-off clothing.



The future land to which the spirits of the dead go is believed by the Blackfoot to exist somewhere in the vicinity of the Sand Hills. The idea of the condition of the dead differs somewhat from the ideas held by other tribes, since among the Blackfoot the future life is not one of happiness, but of indifference. The people of the spirit land are supposed to lead the life of ghosts, and to be always surrounded by illusions. For example, they are said to be always hunting buffalo which, pursued for a while, suddenly vanish and leave behind the skeletons of mice. This may be the reason why the constant prayer of the Blackfoot is that they may live long, but, on the other hand, they have some anxiety to reach the future land in order that they may meet their relatives who have gone before. It is not uncommon for a dying person to be given messages from the living to friends and relatives long since dead. Formerly the dead were placed in trees or upon high points of land, where, in many cases, a lodge was erected and fitted up with all the common utensils of daily life, and the body deposited in its bed as if in sleep.

#### RELIGIOUS IDEAS.

At present it is generally agreed that the American Indians did not have the conception of a single personal God, but abstracted the phenomenon of nature and expressed it by terms analgous to our word power. The Blackfoot seems to look upon this power as pervading the whole world of human experience, and as the cause of all that there is. Every object in the world, especially every living object, is regarded as possessing the means of manifesting this power in some way. As he looks about him he sees animals and men possessing kinds of power that would be very useful to him, and, in consequence, sets about making sacrifices and prayers that he may receive some of this power. For example, he has observed that the owl has great power over darkness, and he sometimes makes sacrifices and prayers directly to the spirit of the owl for some of this power to be transferred to himself. If an owl should appear to him in a dream and teach him some songs and rituals he would accept this as a real manifestation of power. It is sometimes said that the Indians of the Plains worship the sun, but this is not strictly true, for the Blackfoot at least look upon the Sun as simply one manifestation of the power of the universe. Another peculiarity of this belief is that the individual is given no credit for intelligence and ability, because anything that he may do is the result of the direct transference of power to him. For example, I was told that the white man who invented the phonograph was nothing more than a fortunate individual who prayed to the power of the universe for the ability, and that this power took pity on him and told him in a dream to take certain pieces of wood and metal, and put them together in a certain way. According to this view the individual counts for nothing and deserves no credit, except in so far as he is the fortunate individual to be favored. Consequently, the religious activity of a Blackfoot consists in putting himself into a position where the power will take pity upon him and give him something in return. At the time of the Sun Dance men sometimes practiced self torture to this end, because their great suffering was supposed to excite the compassion of the power.

## ART.

The decorative art of the Blackfoot consists chiefly of quill worked and beaded designs, and of painted designs upon raw hide bags representing geometric forms peculiar to the Plains Indians. While several of the Plains Tribes have introduced into this art a special form of symbolism, the Blackfoot either never practiced such symbolism or else lost it before the subject was investigated by ethnologists. They look upon geometric designs as objects copied from other tribes. Even in the time of Maximilian\* it was asserted that the circular designs upon a man's shirt were borrowed from the Assiniboine. A considerable number of designs are recognized by the Blackfoot as Gros Ventre in type. It seems probable that the Blackfoot copied the objective aspect of the decorative art of the Plains Indians, without appreciating its symbolism. However, the Blackfoot have symbolic designs expressing religious ideas, but the character of this art is realistic in contrast to the geometric character of decorative art. The best examples of these designs are the decorations on the "painted lodges," representing stars, trails, animals and men. In general, it appears that the Blackfoot represent plains decorative art in its objective aspect only.

## MYTHOLOGY.

As may be expected, the myths of these people show evidences of mixture of cultures. In the story of the Old Man we have the characteristics of the trickster of the Columbia River Region, and the Coyote of the Plains, but the Old Man is regarded by the Blackfoot as a trivial character. Some observers have confused this Old Man with a term used in praying to the sun, where the latter is addressed as old man in a different sense. The raven is a character often met with in their mythology, but seems to be confused with the Thunder Bird, a kind of an eagle being of the Plains Indians. However, the raven is not regarded as the creator of the world as is the case in other parts of Western Canada. The greater part of the mythology of the Blackfoot consists of mythical accounts of the beginnings of medicine bundles and societies and these accounts are important parts of the rituals for the same. They are usually recounted in the ceremonies and the ceremony in turn is usually a kind of dramatic rendering of the incidents recounted in the myth. While these myths possess certain minor characteristics that may be recognized as Blackfoot, their plots are practically identical with myths found among the Arapaho and the various divisions of the Sioux. A comparative study of the mythology of the Arapaho, and the Blackfoot leads to the conclusion that the latter acquired the greater part of their ritualistic mythology from the Gros Ventre, with whom they lived in peace for many years. On the other hand the Blackfoot have been in contact with the Cree from whom they seem to have borrowed rituals and myths relating to the treatment of disease. However, it is impossible to come to any satisfactory conclusion as to the sources from which the Blackfoot mythology has been derived, because the Gros Ventre and the Cree are also of Algonquin stock from which it follows that the three tribes had a common origin, but there is rea-

\*Travels in North America, p. 248.

son for believing that the Gros Ventre, as a part of the Arapaho, acquired the culture of the Plains first and then passed it on to the Blackfoot. It is interesting to note that in like manner the Sarcee, an Athapascan tribe, lived with the Blackfoot so long that they acquired the Plains culture.

## 7. THE KOOTENAY INDIANS.

BY ALEXANDER F. CHAMBERLAIN.

*Habitat, tribal names, etc.* The Kootenay or Kitonaga Indians inhabit a pear-shaped region, having its apex at about 52° n. lat. in British Columbia, and extending at the base into northern Idaho and Montana, including the country about the Kootenay Lake and the head-waters of the rivers Kootenay and Columbia, lying between the Rockies and the Selkirk range. Their traditions suggest that they are comparatively modern intruders into this area from some quarter to the east of the Rockies, possibly around the head-waters of the Saskatchewan. The origin of the name Kootenay,—the Indians themselves use the form Kitonáqa or Kutonáqa,—is unknown. It appears first as *Cattanahowes* on the map accompanying Mackenzie's *Voyages* (1801), and has been spelled since in a great variety of ways. Other former names of the Kootenay are Flatbows, Skalzi, Lake Indians, etc.

The Kootenay number about 550 in British Columbia and nearly as many in United States territory, the largest group being connected with the Mission of St. Eugène in the Upper Kootenay country. The tribal or local divisions of the Kootenay are as follows:

I. Upper Kootenay tribes including: 1, *Aqkiskenukinik*, "people of the two lakes," settled about the upper Columbia lakes, chiefly at Windermere; 2, *Aqk'amnik*, "people of Aqk'am (Ft. Steele)," the Indians about Ft. Steele and the Mission of St. Eugène; 3, *Yak'et aqkinukleet aqkts'makinik*, "people of the Tobacco Plains," called also *Aqk'aneqonik*, "Creek Indians," who live in Tobacco Plains to the south. II. *Aqkotlatlqo*, Indians of the Lower Kootenay, partly in British Columbia and partly in Idaho. III. *Aqkiyenik*, "people of the leggings," the Indians of Lake Pend d'Oreille.

*Relations with other peoples.* Of the Salishan tribes to the west, north and south, the Kootenay have had more or less close relations with the Shuswap, whom they call *Tlitkatuwumtlaet*, "No shirts," because, when first met, they had no buckskin shirts like those of the Kootenay; the Okinagan, or Okinaken, also called *Kokenuk'ke*; the Colville Indians, called *Kqoptlenik*, "those dwelling at the Falls;" *Kalispelm*, called *Kanuktlatlam*, "those who compress the side of the head,"—in allusion to their head-flattening custom. Of the Shahaptian stock, the Kootenay know in particular the Nez Percé, whom they call *Säptet*, said to mean "grass-basket makers," and the Yakima, called *Yaäkima*, for which a folk-etymology, "foot bent towards the instep" is offered. Of the Siouan stock they are more or less acquainted with the Assiniboin, or Stonies, called by them *Tlutlämaëka*, or "Cut-throats," and also *Gutlúpuk*, and the Sioux, known as *Katskagítlsak*, "Charcoal legs."



Of Algonkian peoples they know especially the Blackfeet or Sahantla, "Bad People," and the Crees, called Gútskiáwe, "Liars." The Athaphaskan Sarcees, to them known as Tsuqo, or Tcoko, and also Saksíkwán, come likewise within the range of their acquaintance. At the Columbia Lakes a small colony of Shuswaps (Kin-baskets) has existed for a long time within Kootenay territory.

With the Blackfeet and some others of the plains tribes, the Kootenay used to hunt the buffalo and at various periods alliances of some importance must have existed between these Indians and the Kootenay. The Kootenay name of the Blackfeet hails from the time when these two peoples indulged in the fierce wars still remembered by some of the survivors of the days when these hereditary enemies so often took the war-path. Some intermarriages, however, have occurred between the Kootenay and the Blackfeet, besides alliances due to slavery, adoption, etc. Intermarriages have also taken place between the Kootenay and the Colville, Shuswap, Yakima, and even Cree. The Chinaman is known to the Kootenay as Gooktlam, "Tail-head," and the Indians share the feeling of the whites towards him. The negro, for whom the Kootenay have some dislike is simply Kámkokokotl, "Black." For white man the Kootenay employ the term Suyäpi, which is identical with Nez Percé sueapo, and is probably a loan-word.

In the palmy days of the fur-trade the Kootenay country was visited by individuals belonging to many Indian tribes, other than those noted, and the name "Kanaka," borne by a Lower Kootenay, indicates that the Hawaiian employees may also have left traces of their presence among these Indians.

The Kootenay word for "Indian" is aqkts'makinik, the etymology of which is uncertain.

*Physical characters.* The Kootenay are among the tallest and best developed physically of the Indian tribes of British Columbia. Of the adult males measured in 1891 by the present writer, two-thirds had statures lying between 1660 mm. (5 ft. 5 in.) and 1779 mm. (5 ft. 10 in.) and one-fourth exceeded 1739 mm. (5 ft. 8½ in.), the average being 1690 mm. (5 ft. 6½ in.) One individual, a fine specimen of young manhood, son of an Upper Kootenay father and a Lower Kootenay mother, had a height of 1846 mm. (6 ft. ½ in.) The only three females measured (aged, respectively, 14, 18 and 40 years) had statures of 1557 mm. (5 ft. 1 in.), 1570 mm. (5 ft. 1 4/5 in.) and 1582 mm. (5 ft. 2¼ in.) According to Deniker's classification, the Kootenay males belong among the peoples of "more than average stature" and very nearly among the peoples of "high stature."

The cephalic indices of 70 males (five years of age and upward) ranged from 72 to 86; there were 21 cases above 80 and 8 below 75, while between 75 and 80 inclusive there were grouped 41 cases. The Kootenay thus tend to be mesaticephalic, with indications of the intermixture of a brachycephalic (short-headed) type. Of the indices of the 14 females measured, 12 were over 80, and 6 reached 85, while 2 were only 76,—this shows a decidedly brachycephalic type as compared with the males. The cephalic indices of the half-breeds (white-Kootenay), of whom 10 were measured, show for both sexes together a range from 70.5 to 84.9. The lowest cephalic index met with among the Kootenay was 70.5, in the case of the 14 year old daughter of a white father and a Lower Kootenay mother; the high-

est was 86.6, in the case of a nine year old girl from the Columbia Lakes tribe, whose seven year old sister had an index of 82.2.

The average weight of 13 adult males (in their very light summer clothing) was 151 pounds, the two heaviest (the tall young Indian just referred to and another) tipping the scales at 177½ and 177 pounds. The few young children weighed seemed below the average for similar ages among the whites. Between 10 to 20, however, the Indians kept up to the white average in weight, or rather somewhat exceeded it. The writer's guide, who was 22 years old, weighed 177 pounds and was 5 feet 7 inches tall. The limbs of the Kootenay appear to be in general well-shaped, but the hands are sometimes rather large and the legs in some cases bandy, the last possibly due to horse-riding, etc. The face is not infrequently spoiled by a disproportionally large mouth and thick lips, while the medium-sized ears are lengthened and distorted by the use of heavy earrings. The nose is often rather flat and the nostrils sometimes so large as to give rise to nick-names among the Indians themselves. The face gives the impression of being broader than it really is and the cheekbones are often quite prominent. The forehead is generally broad and straight, and the chin well-formed in both sexes. The eyes are characteristically dark-brown, the hair straight and black (lighter in children and adults habitually bareheaded). A few cases of "wavy" hair were noted, and one Indian was nick-named "Curly-head."

In spite of the custom of removing hair from the face and the body prevalent among these Indians several individuals (generally old persons) were met with who possessed small beards and moustaches.

The skin-color of the Kootenay is the "brown" or "red" characteristic of the North American Indian and easily distinguishable from the "yellow" of the Chinese found in the country. From these also the Kootenay are marked off by their general appearance. The so-called "Mongolian eye" is not common among them.

In matters of physical endurance (e.g., walking, horse-riding, etc.), the Kootenay probably equal (or even surpass) the whites, but in wrestling, jumping and other tests of strength, where "knack" counts for a good deal, they appear to lag behind, more, perhaps through lack of knowledge and application than from absence of strength *per se*.

*Temperament, character, etc.* While the Kootenay furnish examples of outbreaks of anger, jealousy, etc., there are probably not more numerous than would occur in an equally large group of whites under like circumstances, though the absence of certain conventional restraints may seem to increase their magnitude and importance, and allow them fuller and more complete expression. The writer had personal experiences of several instances of Indian moroseness, resentment, anger and petulance. On the whole, however, the Kootenay (especially the young men) gave evidences of a gay and lively temperament and a capacity for heartily enjoying themselves. They possess a certain sense of humor, and their feeling for the ridiculous, leads them to laugh at and make fun of the mistakes and blunders, and even the mishaps and accidents, of their fellows and of such strangers as may be among them. They are also fond of playing tricks which make the victim anticipate great



danger, when only a "scare" is intended. They find much ground for amusement in the mistakes made by the whites in their efforts to learn the Indian language, especially when the mispronounced word suggests another,—a sort of unconscious pun. Their sense of humor appears also in their comments upon the whites and their actions, in the descriptions of the characters in myth and legend, etc. The well-known dignity attaching to chiefs and other prominent personages among the American Indians can also be observed among the Kootenay, as well as the expression of this dignity when "offended," although the most noteworthy example of this that came to the writer's knowledge was in the case of the leader of a small party of Blackfeet who were on a visit to the Kootenay.

The Kootenay possess real affection for children, and it is by no means uncommon to see a man carrying a little child, or allowing it to play with him in right childish fashion. It is only since contact with the whites that some of these Indians have taken to chastising severely their offspring. The embarrassments of love-making affect the young Kootenay much in the same way as they do the white youth, as the writer had occasion to note in the conduct of the young Indian who was his guide,—he happened to be courting a maiden of his people, which fact was revealed by his features and his actions as surely as it would have been in the case of one of our race. He blushed frequently, as an Indian can. The writer was much impressed by the fidelity and sense of personal attachment evidenced in his guide who was continually with him for several months.

At the moment of separation this young Indian was affected to the point of tears and the farewell was one to be long remembered.

The good-nature and rather high morality of the Kootenay were noted by the whites who came into contact with them in the first half of the nineteenth century, later on, the Lower Kootenay, who seem to have been less yielding to missionary influence, came to have not so good a reputation with the whites as had the Upper Kootenay. In 1888 the Indian authorities of the Dominion described (with some exaggeration) the latter as "a strictly moral, honest, and religious people." And in 1845, Father De Smet spoke equally well of the Kootenay among whom he labored as a missionary. The Upper Kootenay have resisted the temptation of strong drink better, perhaps, than almost any other Indian tribe of the country, and the morality of their women is distinctly higher than exists among many other tribes, for they have made special efforts to preserve them from the evil influence of lewd white men and the dissolute Indians of neighboring stocks.

*Intellect, senses, etc.* The Kootenay may be said to possess quick judgment, alert perception, good memory, and a rather high general intelligence, with a noticeable sense of curiosity, at least in regard to the actions and achievements of the whites. The Kootenay children at the Mission school of St. Eugène, near Ft. Steele, in the Upper Kootenay country, exhibited a marked capacity for learning to read and write the English language in a very brief period of time, and, even where no school influences have at all made themselves felt, there exists among these Indians considerable ability (the writer secured several hundred specimens made for him by various individuals) in drawing with pencil on paper. This fact is all the



more interesting since few picture-writings (if any) and other pictographic records are reported from the Kootenay. The writer believes, however, from stray observations of Indians and whites, that it is possible that these Indians may have had something like the "calendar records" known to the Plains Indians and described by Mooney and Russell as existing among the Kiowa, Pima, etc. The brief description given by one individual would perhaps justify such a statement. The Kootenay have a "map-sense," and can both understand and interpret the chief features of the maps of the whites, and draw crude ones themselves of their own country, its rivers, etc.

The Indians' knowledge of their environment, the fauna and flora of the region, etc., is quite extensive. The writer's Kootenay guide, a young man of 22, was able to give the native names of some 100 species of plants, many of which are, or were used for medicinal or industrial purposes. He also, at one sitting, gave the Indian names (with brief descriptions) of 13 varieties of fish, and 91 species and varieties of birds, besides the appellations and descriptions of the animals, etc., of the country. His descriptions of the various sections of the Kootenay region, of the rivers, lakes and mountains were always accurate enough, and his sense of locality was marked.

The senses of the Kootenay do not appear to exceed those of the whites except where practice and special "education" have made their influence felt. This is most noticeable in the case of sight and hearing. The taste of these Indians leads them to sometimes tolerate the "soap-berry," but not nearly so much as do their neighbors, the Shuswap; it is very unpalatable to the whites. The taste of whiskey is also considered "bad," and the "soap-berry" was sometimes described as "tasting like bad whiskey." The same term (kwistlâqane) is applied to "salt" and "vinegar." The writer's Indian guide developed a strong liking for orange marmalade, the taste of which appealed to him. For sugar, in any form, these Indians have a great desire. They have also taken to tea as a drink. Coffee and cocoa they likewise drink readily enough in addition to numerous "teas" and other herbal concoctions of a more or less medicinal nature in use among them from earlier times. The sense of smell plays a larger rôle among the Kootenay, perhaps, than with many of the other Indian tribes of the country. Several plants are admired for their scent or perfume. One they apply to their nostrils, or where it abounds, roll about on the ground, sniffing its fragrance with evident delight; another they put into bags to use as pillows; a third is thrown on the fire to make "a good smell."

The color-sense of the Kootenay, as revealed by their color-names, seems to be fairly well developed, and they have at least seven different color-names for describing horses. Color-names are also quite extensively used in the descriptions of birds, etc.

An interesting side of the Indian mind was the perception by many of the members of the tribe of the object and intentions of the writer in investigating their language, customs, etc., and the recognition of the value of placing these on record before the extinction of the race. The sympathetic cooperation of the writer's guide and a number of other Indians was very encouraging, although their insistence upon his "getting everything right" was sometimes embarrassing.

*Occupations, industries, arts.* In earlier days the Kootenay were famous hunters and joined the Blackfeet and other tribes in the great annual buffalo-hunt on the plains beyond the Rocky Mountains, memories of which still survive among them. They are still skilful in the hunting of bears, wolves, deer and smaller animals, whose flesh serves them for food, while the skins are disposed of largely to the white traders. Before entering upon the great winter hunt, the Upper Kootenay used to have a festival celebrated some time in December. This the Catholic missionaries have very aptly replaced with Christmas ceremonies, accomplishing the result by a not too sudden transition. The hospitality of the season was reinforced by the custom of the tribe by which the hunter distributed the produce of the chase among his relatives, friends, etc. Since the introduction of fire-arms, the old bow and arrow has practically disappeared (but some of the older men may still be seen with bow and quiver, and the children use small bows and blunt arrows to kill birds, etc.) It is said that in former times the "fool hen" was lassoed with nooses, and water-fowl, captured by means of a fibre net attached to a pole.

Fishing is still a chief occupation of the Lower Kootenay in particular, the Upper Kootenay, except during the salmon-season, being less devoted to it, probably on account of their present situation and their closer relation to the whites. Among the ways of fishing known to the Kootenay are the following: With hooks (formerly of bone or gooseberry spines), through the ice with hook and line, driving the fish into the shallows by pounding on the ice, gaffing (now much used with modern appliances borrowed from the whites). The Lower Kootenay, who make much use of dried fish as food, obtain fish in large quantities by means of basket-traps and dams or weirs of sticks and wicker-work. Spearing fish was also much practiced by the Kootenay and at least three sorts of fish-spears were in use among them.

The Lower Kootenay, who are less subject to the influence and control of the whites, are more given to river-life than the Upper Kootenay. Both now own many horses, but the former have become more sedentary and some of them, *e. g.*, Isidore (chief in 1891) even possess good ranches. Many of them make a living by acting as surveyors, transporters, guides, etc., for the white population, miners and others. A few "prospect" for gold.

The "lodges" of the Kootenay were of two sorts, the skin-covered tepee of poles, called *aqkitlanam*, and the *tanatl*, or tent of rush-mats. Communal dwellings were unknown.

Three names for canoes are current in Kootenay: *teik'eno* (canoe of pine or spruce bark), *statlam* (dug-out), a word borrowed from one of the neighboring Salishan tongues; *yäktsetl* (other than dug-out canoes). The typical canoe of the Kootenay, called *yäktsetl*, is of the so-called "Amur river variety," being pointed at both end under water. They are very skilfully navigated by the Indians.

The "axes" of the Kootenay were made in early days of flint, or of elkhorn; knives also of like materials; needles, awls of the small leg-bones of animals, etc. Hammers of stone have not yet disappeared altogether; for pounding a roundish stone wrapped in skin was often used. Tobacco-pipes of stone, little ornamented, were

formerly much more in use, the material being procured largely from the Lower Kootenay country.

The only general musical instrument of the Kootenay is the drum (made of skin stretched over a stick bent into a circle), now common only among the Lower Kootenay, and manufactured by the Aqkayezik tribe. Formerly the Kootenay are said to have possessed a sort of reed pipe and a bone flute. In their gambling songs sticks are beaten upon a log.

The art of basketry was formerly much more cultivated by the Kootenay, and is passing away altogether among the Upper Kootenay tribe. Water-tight baskets (of varied form, size, stain and ornamentation) of split roots are still made by the Lower Kootenay. Baskets, etc., are also made of birch bark.

From skins treated with deer's brains moccasins, shirts, etc., are made. The dress of the Lower Kootenay is more primitive than that of the Upper. Even when they assume the dress of the whites many Indians continue to wear the old breech-clout. Wolf-skin bands around the forehead were an ancient head-dress. Others were caps of skunk-fur, and of the feathers and skin of the loon. Hair-dressing in braids (now three, formerly two) is common. Among personal ornaments and charms were noticed the following: Ear-rings of shell, necklaces of bear's teeth and other amulets, feathers of the owl, chicken-hawk, etc.; strings and strips of cloth, silk, fur, ribbons, etc., the most prized being strips of weasel fur. At present personal ornamentation of this sort is rather profuse (finger-rings are now also much in vogue). In earlier times necklaces made from a certain shell found in the rivers of the Lower Kootenay region were much worn. Since contact with the whites bead and silk ornamentation of clothing, etc., has become wide-spread. Face-painting is still much in use among the Lower Kootenay. The Kootenay have the reputation of being enormous eaters, and have come to be fond of the flesh of horses, cattle, etc., even, in some cases, where no white man would touch it. They are also to be counted among the peoples of the globe who consider the louse infesting the human head a dainty morsel.

Of the plants of their environment they have made considerable use for food (service-berry, wild gooseberry, huckleberry, strawberry, soap-berry; wild onion, root of orange lily and several other plants; mushroom, lichens, tree-moss, gum and inside bark of larch; various tea-shrubs and tobacco herbs), economic (several plants, including "Indian hemp," for fibre, strings, etc.; lichens and roots for dyes), and medicinal purposes (for sore eyes birch bark, Oregon grape root, dog-wood, etc.; for consumption, coughs, etc., various "tea-plants," etc.; for wounds, cuts, bruises, decoctions of several barks, leaves, etc.)

*Health and disease.* The hygienic institution of the "sweat-bath" was in full flourish among the Kootenay, the name of the "sweat-house" being *wisayatl*. Among the Kootenay venereal diseases are not at all common. The most prevalent affections are consumption (and related diseases) and eye troubles, the latter due to the smoke of the lodges, etc.; scrofula, running sores on the face and neck, are also not uncommon. Goitre, warts, toothache (not frequent) were also noted. Two deaf and two blind Indians were met with and several "hermaphrodites" were said to exist among the various tribes. Tattooing for medical purposes has been introduced among the Kootenay by the Chinese "doctors," to whom they now often have re-



course. The nostrums of the white man also find vogue among these Indians. The "cure" practiced by their own shamans was of the characteristic "medicine man" sort—blowing and sucking, pinching and manipulating, etc.

*Games and amusements.* A favorite amusement of the Lower Kootenay on Sunday afternoons is "horse-running," *i.e.*, driving the horses to and fro on the great grassy plain for "the fun of it." In this even small boys take part. Breaking stubborn horses, a task of the young men, affords the onlookers abundant grounds for merriment and sarcasm. Both on land and in the water, the children play in imitation of their elders, who fashion for them toy canoes, weapons, implements, etc. The writer found a little Upper Kootenay boy playing hide-and-seek with a little white girl in the most approved style. A sort of round game with song and action was in use among the children. The word for "doll" in Kootenay, *tlinkoiyam*, seems to mean "plaything."

The Lower Kootenay are still much addicted to gambling, as were formerly also the Upper Kootenay, who have been largely weaned from it by missionary influences. It is among the former that the great gambling game survived in 1891. It is the widespread stick-guessing game, in the pursuit of which Indians have been known to pledge and lose everything they possessed, including even their clothes and their wives. The game often lasts for days at a time, and with it are connected many songs and dances.

*Social and political organization.* The Kootenay are remarkable for the simplicity of their social structure, which contrasts strikingly with the very complicated systems of some of the other tribes and peoples of British Columbia. There are, apparently, no evidences of the present or past existence among them of clan systems, totemic institutions, secret societies, etc. Each local or tribal community seems to have had a chief (the term in use, *nasoke*, or *nasukwen*, signifies, literally, "the good, or strong one"). This office (to be held only by males who had reached the age of 30) was hereditary, but the people had always the right to select some other of the family when the heir was incompetent or unworthy, or refused the chiefship. It would seem that the "medicine men" sometimes influenced the selection. The power of the chief was limited by the advice and action of his council. In former days there was also elected a "buffalo-chief," whose authority extended over the great hunting expeditions. In the old days slavery existed, the victims being chiefly women and children captured in wars with the Blackfeet, etc. They were not cruelly treated. The social position of woman among the Kootenay did not differ much from that accorded her by the surrounding tribes, and in the old days polygamy was in vogue. Girls were thought fit to marry at 15, boys at 20. The husband could send back his wife to her people within a year, if found bad or unsatisfactory. Adultery was not severely punished, the guilty woman being marked by the loss of one of the braids of her hair, which the offended husband cut off. Marriage of first cousins was forbidden. Divorced women and widows were allowed to re-marry.

Adoption by marriage and by residence was in use, and relatives took good care of orphans, brothers of sisters, etc. Women could hold property, and to the women and children went the lodge and its contents on the death of the father; horses, canoes, weapons, etc.,

went to the male children of age. In earlier days, if the deceased left no relatives, it is said, a "strong man" took possession of his property. Private property in land was unknown. The debts of a dead man were paid by his relatives, a custom which worked to the advantage of the white traders. Descent seems to have been traced through the mother. Murder was punished by the death of the offender at the will of the relatives of the victim. A sort of composition by wergild was also known.

*Religion and superstition.* The highest aspect of the religion of the Kootenay seems to be a species of "sun worship" on the way toward the recognition of an ever-ruling and beneficent spirit. The pagan Kootenay believed that the dead go to the sun, and that at some time in the future they would come back to meet the Indians at Lake Pend d'Oreille, in northern Idaho. At this place the various Kootenay tribes used to meet at a festival, with many dances, which lasted for days, but was held at rare intervals. On their way thither, all who were not engaged in family or tribal disputes danced sun-wise round a fire—the rest the opposite way. Formerly, it is said, the first-born child was sacrificed to the sun for the welfare of the whole family, the first joint of the finger cut off, and other like offerings made. But a good deal of this may have been imitated from the Blackfeet, with whom they were so long in close contact. A survival of "sun worship" is to be noted in the ceremonial *wusitwatlak-oine*, "making the sun smoke." Prayers seem also to have been offered to the sun.

The Kootenay believe in the existence of spirits in everything animate and inanimate, and at death the spirits of Indians may enter any object or creature whatsoever. The touch of the spirits causes disease and death. Spirits of the dead return to visit their friends. Formerly sacrifices were made to the spirits of mountains and forests to secure success in hunting, etc. The mountain spirit, especially, figures in myth and legend. The shaman, *nipikaka*, gets his name from the fact that he has to do with the spirits (*nipika*), to whom he prays and whom he invokes by set ceremonies to reveal to him matters for prophecy, give him power to cure disease, etc. The Kootenay shamans seem to have impressed many of the whites with their "satanic power" in the early days. They are said to have been initiated in the woods with fasting, and were believed to be able to kill animals at a distance by merely glancing at them.

The birth ceremonies of the Kootenay were, probably, connected with such "sun worship" as existed. Segregation of girls at maturity, with certain food taboos, was in vogue. In former days the dead were buried with considerable ceremony, loud shrieking being a part of the mourning rites. The property of the deceased was buried with him or hung on a tree near his grave. Sometimes the burial took place on low lands, which were covered with water when the river ran high.

*Mythology and Folk-lore.* The Kootenay have a considerable number of cosmologic and explanatory myths. The sun, regarded as a woman, was made by the coyote (or, by other accounts, the chicken-hawk), the moon (looked upon as a man), by the chicken-hawk. The stars are Indians, who have been taken up into the sky, or reached it in some way or other. The Great Bear is a female grizzly, the Milky Way, the "dog's trail." The thunder is caused by a great bird, the

shooting of whose arrows makes the lightning. The coyote gave his daughter, when she married the thunder, the clouds for a blanket. There is a characteristic deluge legend in which the chicken-hawk (a man) figures, together with a monster who ravishes his wife, and whose death leads to the catastrophe. In some version of this tale the "monster" is a lake-animal or a fish.

The Kootenay have many animal tales in which the coyote (prairie-wolf) is the chief figure; he caused the first prairie-fire, got thrown into fire by the chicken-hawk (whence his singed fur), got his mouth burned by trying to smoke the buffalo's pipe, appeased the mountain spirit, ran a race with the fox, etc. Other prominent animals are the grizzly, the fox, the "mountain lion," the skunk, the wolf and the buffalo. Of birds the principal figure is the chicken-hawk (*Accipiter Cooperi*); the owl is represented as an old woman who steals children. The butterfly is mistaken by the coyote for a man instead of a woman, and the cricket is the coyote's younger brother. The frog (grand-mother of the chipmunk) cheats the deer in a race.

There are many legends of giants and similar monsters. Also two interesting stories of "Seven Heads" and "Lame Knee," which approach in nature and content the European folk-tale.

The Kootenay have, likewise, some folk-lore in relation to the cries of birds (owl, robin, tomtit, etc.). For further information concerning the Kootenay Indians consult the following:—

F. Boas: *Einige Sagen der Kootenay*. Verh. der Berliner anthrop. Gesellschaft, 1891, pp. 161-172; Kootenay Indians, in Report of the British Association for the Advancement of Science, 1889. A. F. Chamberlain: Report on the Kootenay Indians of South-Eastern British Columbia. Report of the British Association, 1892, pp. 549-611; Kootenay Indians, *American Antiquarian*, 1893, pp. 292-294, 1894, pp. 271-274, 1895, pp. 68-72; Kootenay "Medicine Men." *Journ. of Amer. Folk-Lore*, 1902, pp. 95-99; articles on Kootenay language, etc., in *American Anthropologist*, 1894, 1900-1904, *Archivio per l'Antropologia* 1893, *Verhand. der Berliner anthrop. Gesellschaft*, 1893, 1895, *Proceedings of the Amer. Assoc. Adv. Science*, 1894, 1895; *Tales of the Kootenay Indians*, *Mem. Intern. Congr. Anthropol.* (1893), pp. 282-284. E. F. Wilson: *The Kootenay Indians*; *Journ. Amer. Folk-Lore*, Vol. III. ((1890), pp. 10-12, and also *Our Forest Children*, Vol. III. (1889-1890). J. Maclean: *The Kootenay Indians in "Canadian Savage Folk,"* (1896), pp. 137-148. P. J. De Smet, in "New Indian Sketches (1863)," pp. 90-91, 104-117, 118-125. Ross Cox in "Adventures on the Columbia River (1831)," Vol. II. pp. 152-155. Prince Max. of Wied-Neuwied in "Travels (Trans. Lloyd, 18-41)," pp. 242-248, 272-279, and Appendix. O. T. Mason: *Pointed Canoes of the Kutenai and Amur*. Rep. U. S. Nat. Mus., 1899, pp. 523-537.

## 8. THE CANADIAN DÉNÉS.

BY THE REV. A. G. MORICE, O.M.I.

If Alaska were politically one with Canada, as it is geographically, we could say without hesitation that, as regards territory, the Dénés are the most important of all the aboriginal races within



the Dominion. The Algonquin are close competitors for territorial supremacy, but there is no doubt that the area occupied by the former is more extensive within the same political division.\* Being so remote from civilization, the Dénés cannot boast so thrilling a history as some of the Algonquin tribes; but their very isolation from disintegrating influences and the compactness of their ancestral domain render them so much the more attractive to the ethnologist. It stands to reason that the more the student of anthropological lore strays from long established settlements by representatives of our own blood, the more genuinely aboriginal must be the life, manners and customs of the natives he will meet.

If we add to this consideration that, in accordance with their wonderful receptiveness, the Dénés have appropriated many of the sociological peculiarities of the heterogeneous tribes with which they have been in contact, it will soon become apparent how extremely interesting a close study of those Indians must be.

By Dénés is meant that great family of American aborigines wrongly called Athapaskans, Tinné or Tinneh by scholars who think it proper to designate it by an Anglicized Cree word, and by travellers who, in their ignorance of its dialects, take some disfigured form of word-endings for its national name.† Déné means men, or people, and when that nation assumes that apparently pretentious appellation, it simply follows the example of many other divisions of mankind, such as the Eskimos, the Aleuts, the Hurons, some Carib tribes, the Tungus of northern Asia, the Ainos of Japan, etc. Now, is it logical to call a people by a hybrid word, of which it knows nothing itself, and which does not represent the thousandth part of the territory it claims as its own, when it already possesses a name, which is easy of pronunciation and fully representative?

And here let us premise that tribes of that race are to be found all the way from the sunny plains of Mexico to the frozen steppes of the Eskimos, important off-shoots of the family tree having taken root at irregular intervals throughout the western or Pacific States of the American Union. This essay shall embrace only those which have remained within the limits of our own Dominion.

Their habitat extends practically from the mouth of the Churchill River in the east, following the course of that stream in a southwest direction; then, by 54° latitude, up to the sources of the Northern Saskatchewan, where their southern boundaries cross the Rocky Mountains into British Columbia. Within that Province they are to be found as far south as the Lillooet range of mountains, by about 51° 30'. North of that line their representatives occupy the entire country up to the Arctic Ocean and the Strait of Behring, with the exception of narrow strips of land claimed by the

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\*Powell's ethnographical map, which accompanies his important paper on the classification of the aboriginal stocks north of Mexico (Seventh Ann. Rep. Bureau of Ethnol.), invaluable as it is otherwise, must nevertheless be pronounced misleading, inasmuch as it gives to the Crees the territory adjacent to Lakes Caribou, Wollaston, Cold, and Isle-à-la-Crosse which belongs to a Déné tribe. This makes a difference of fully five degrees of latitude and as many of longitude. The land of the Eskimos is also made thereby to project too far south along the Mackenzie. On the other hand, it attributes to the Dénés several spots on the littoral of Alaska which are in reality settled by Eskimos.

†This question is fully treated in my "Notes on the Western Dénés," pp. 8-10. Trans. Can. Institute, vol. IV.

Eskimos on Hudson Bay, the polar sea and round Alaska, while the Pacific coast is also throughout settled by heterogenous stocks.

## I.

The different tribes into which the Canadian Dénés are divided are, from north to south:

1st. The Loucheux, the Quarrellers of Sir Alexander Mackenzie, sometimes, but wrongly called Kutchin, whose habitat extends from the frontiers of the Eskimos' fishing grounds to 67° of latitude north, and between Anderson River in the east and almost the Pacific Ocean, throughout the lower Mackenzie and the vast forests of Alaska. They number some 5,500 souls, forming according to Petitot,\* thirteen distinct subdivisions based mostly on linguistic peculiarities.

2nd. The Mountaineers, or Eta-go'tinne, who roam throughout the valleys within the Rockies. Population about 300.

3rd. The Hares, a timid tribe among not any too valiant congeners, whose hunting grounds lie along the Anderson and the Macfarlane Rivers, from the northern shores of Great Bear Lake. They may be 600, with five subtribes. They were originally famous for the smartness of their conjurers.

4th. The Dog-ribs, who hunt to the number of nearly 1,150 souls, between Great Slave Lake and Great Bear Lake, east of the Mackenzie, as far as the Coppermine River. They pretend to be the offspring of a dog: hence their name.

5th. The Slaves, whose numbers are about the same, are divided into five subtribes. Their habitat may be described as lying between the western shores of Great Slave Lake, along the banks of the Mackenzie, as far as the outlet of Great Bear Lake. They are also found along the Liard River, east of the Rocky Mountains. Sir John Franklin called them Strong Bow Indians, and their present name, which betokens the poor opinion of their manliness entertained by their neighbors, is due to the Crees of the south.

6th. The Yellow-knives may number 500. They are the Red-Knives of Richardson, the Copper Indians of Hearne and Franklin. Their original habitat, the valley of the Coppermine, explains the nature of their name. Alone of all the Déné tribes, they formerly boasted the possession of copper tools, wrought out of pieces of that metal they found scattered on the slopes of a particular mountain. They now roam chiefly over the barren steppes to the northeast of Great Slave Lake.

7th. Closely allied to the above are the Cariboo-eaters, an important tribe numbering 1,700 individuals or thereabouts, whose territory comprises the waste lands east of Lakes Cariboo, Wollaston and Athabaska. The trading post of Fond du Lac, on the latter, may be considered their commercial rendezvous.

8th. The Chippewayans are divided into the Athabaskans, who hunt around Lake Athabaska, as well as along Slave River, and the Chippewayans proper, who dwell on the shores of Lakes Isle-à-la-Crosse, Cold and Heart. They form an aggregate of about 4,000 souls.

9th. The Nahanaïs are, like the Loucheux, distributed over both sides of the Rocky Mountains, though their main seat is west thereof

\**Monographie des Déné-Dindjié*, p. xx, and other works. Fr. Petitot is our main authority on the distribution of the northeastern Dénés.



They form a total not short of 1,000 persons, whose habitat is the Stickine River and tributaries, in northern British Columbia, from Tahltan, near Telegraph Creek, up to Dease River and the Upper Liard, some distance east of the Rockies.

10th. The Beavers, who might be considered a subdivision of the Sékanais (see No. 12), are now the aboriginal inhabitants of the vast plains along Peace River, immediately to the east of the Rocky Mountains. Their numbers are not much more than 650 souls.

11th. The Sarcees are likewise an offshoot of the Sékanais, the result of a second scission from the parent tree due to a difference caused by a trivial offense.\* They are now incorporated within the Blackfoot Confederation, to the number of 190 souls, and their present seat is about five miles south-south-west of Calgary.

All the following are western Dénés, within the limits of British Columbia:

12th. The Sékanais, whose original home was east of the Rocky Mountains, and who, for all linguistic purposes, have remained eastern Dénés, are now practically western members of the great aboriginal family under study. After the double secession above recorded and the ravages of want to which the paucity of their economical resources exposes them, they have dwindled to some 450 souls. Their principal trading posts are to-day Forts McLeod and Grahame. The abuse of fire-arms newly in the possession of the easternmost portion of the tribe was the final cause of the exodus westward and of the formation of the Beavers into a distinct tribe.

13th. Immediately to the west of the Sékanais, on Babine Lake and along the Bulkley valley down to French and Morice Lakes, are the Babines, a tribe numbering 530 souls, south of which are

14th. The Carriers, who, like the preceding, are semi-sedentary. Their villages are to be found between Tremblay Lake in the north and Alexandria, a distance of two degrees and a half of latitude. Present population, 970.

15th. Finally, we have the Chilcotins, the southernmost of all the Canadian Dénés, whose habitat is immediately south of the Carrier territory, on either side of the river after which they are called. Since the advent of the whites contagious diseases and other causes have reduced to some 450 their numbers which, but forty years ago, were fully 1,500.

To the above we might perhaps add the Ts'ets'aut, an offshoot of the great Déné stem, which Dr. F. Boas discovered some time ago on Portland Inlet. But these have long since lost their tribal autonomy, if they ever possessed it, and for that reason they may be neglected without impropriety in common with a small band, apparently of Chilcotin descent, who, till some years ago, resided among the Salish of the Nicola valley.

## II.

This enumeration is in itself sufficient to give an idea of the great importance to the ethnologist of the Déné family, even though we do not take into consideration its southern half within the United States. A people covering such an immense territory, under so different climes and with so many distinct dialects, which originally

\*See my "Notes on the Western Dénés," p. 12. Trans. Can. Inst., vol. IV.



rendered social and commercial intercourse difficult, is bound to exhibit numerous points of dissimilarity.

Considered from a physiological standpoint, the Loucheux are undoubtedly the best representatives of the human species within its fold. Tall and well formed—most of their hunters who frequent Peel River Fort being over six feet in height—they have regular features, with high foreheads, fine sparkling eyes, moderately high cheek-bones and a fair complexion.

Their neighbors to the south and east of the Rocky Mountains cannot boast such a good physique. They are generally dolichocephalic, though with receding foreheads, prominent cheek-bones, noses of an aquiline type and yet abnormally broad at the base. Their mouths are wide, and furnished with well set and very white teeth; their lips, apparently too long, give them a quasi-prognathic appearance, when they are not ungracefully parted, leaving the mouth open, while their chins are either pointed and slightly curved up, or receding, especially in cases of real prognathism.

The Dog-ribs and the Slaves met by A. Mackenzie were "a meagre ugly, ill-made people, particularly about the legs, which are very clumsy and covered with scabs."\* Altogether, the impression they made on the great explorer was not very favourable, and they also seem to have been rather unhealthy, owing mostly to their want of cleanliness.

In the west the physical differences of the Déné tribes are still sharper, relatively to the various tribes. While the Carriers are in stature perhaps above the average and stoutly built, with coarse features, thick lips, prominent chins, indices generally more brachycephalic than otherwise, and noses straight with extended nostrils, the Sékanais, their immediate neighbours in the northeast, have fine, almost delicate features, wiry limbs, well formed and sometimes rather long noses, thin lips slightly protruding, and very small eyes deeply sunk in their sockets. Their size and weight are certainly much below the average. On the other hand, the Chilcotins and Babines are short and broad, with heavy features and flattish faces, though the women of the latter have abnormally round and fat heads with remarkably thick lips. The fair sex is more attractive among the Nahanaïs of the north, who enjoy an even whiter complexion which, in many cases, is not far from rosy.

Though all the tribes are always more or less swarthy in appearance, they are nevertheless much whiter, and, as a rule, better looking, than the Salish tribes of southern British Columbia, especially after a stay of some time at home.

The principal traits common to all the divisions of the Déné race are the black and straight hair, prominent cheek-bones, dark eyes,† small hands and feet, which seem to be the heritage of all the American aborigines.

Previous to the advent of the whites among them, longevity was the rule rather than the exception. But the importation of farinaceous foods, strong drinks and consequent vices, not to speak of the more sedentary character of their lives, unaccompanied by the hy-

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\*"Voyages from Montreal to the Frozen and Pacific Oceans," vol. I, Toronto reprint.

†So dark indeed that in young children even the white of the eyes is noticeably tinged with blue, as if this was a reflection of the lustrous black of the iris.

gienic precautions this should entail, generally prove too much for their constitutions. The chief diseases to which they are subject are pulmonary complaints, rheumatism, vitiated blood and, last not least, fear and imagination. I know personally of cases when otherwise healthy individuals died because they thought they had seen in their rambles through the woods a fabulous animal whose appearance is believed to portend evil, and of others who were convinced that they were the victims of the ill-will of persons supposed to be endowed with malefic powers. On the other hand, I am almost as sure that some should have died who survived through the effects of their strong faith in my medical and other abilities. Dowie and his adepts would certainly find a splendid field for their operations among these primitive children of nature.

### III.

As a means of enhancing their natural charms, most of the tribes had but lately recourse to tattooing. But this was always restricted to the face and wrists, and it had never the same connection with clans or totemic ideas as has been noticed on the coast of the northern Pacific Ocean. A few lines from the lower lip to the bottom of the chin or horizontally across the cheeks, with possibly a cross or the symbolic emblem of a bird on each temple, supplemented by additional, but shorter, bars above the bridge of the nose, were the style most in vogue among the women, whilst the men more often omitted the tattooing of the chin, which they generally replaced by some emblematic device on either side of the mouth. They also painted their faces, especially on ceremonial occasions or when animated by evil dispositions. A species of red ochre or vermilion did duty on joyful occasions, while a figure daubed on with charcoal told of warlike or murderous designs. Among the Loucheux both colours were often concurrently used in stripes along the nose, the forehead or the cheeks, according to the whim of the individual.

Nasal and aural pendants of dentalium shells or haliotis were also much in vogue, while, among the Loucheux and partially also the Carriers, two, sometimes three, long shells of that description with juxtaposed smaller ends passed through the septum were preferred. These were replaced among the Slaves and Dog-rib Indians by a goose quill or a small piece of wood.

To those ornaments the Babine women still added a bone or wood labret, thereby giving to the lower lip a prominence which made of the belles of the past generation veritable caricatures. Ear-rings of a peculiar pattern were then the exclusive apanage of men of rank. Finally, youth, rank or social aspirations delighted in shell necklaces and bracelets of wood, horn, bone or, in later times, copper.

When not in mourning, both sexes wore their hair long and parted in the middle. The men had it tied in a knot and falling down to the shoulders, or when in repose, twisted behind the head, much after the manner of the Chinese, while the women preferred to plait it in two tresses falling on their breasts, and often adorned with strings of dentalium shells or of glass beads obtained from the fur traders. In some of the eastern tribes this latter style was followed by both men or women.

In common with most American aborigines and even the natives of the eastern Asiatic littoral, the Dénés have as a rule a few stragg-

ing hairs on the upper lip and the chin, which were sedulously plucked with tiny tweezers made of horn before the introduction of copper, which replaced with them the knives which the Chukchee use for the same purpose.\* It is but right to add, however, that among some of the western tribes individuals are occasionally found with quite heavy beards; but these are, as among the North Asiatic races, almost always coarse, black and straight, hardly ever soft or curly. A few half-blond beards are, however, noticed even with persons of undoubted full Déné blood.

As to their wearing apparel, it originally consisted for the men of a breech-clout of tanned skin, over which a shirt-like vestment of beaver, lynx or marmot skin with the fur next to the body was worn. Among the Slaves and the Dog-ribs this was more commonly of moose skin. These shirts or jackets were cut evenly round and thigh-high among the Chippewayans and other eastern tribes, with the exception of the Loucheux, whose frocks were pointed in front and behind, for the men, while those of the women had slightly larger appendages behind, but none in front. A graceful fringe hanging round the bottom of all those garments, pointed or not, adorned the costume of the various tribes.

Over this rows of beads, dentalium shells, or, in some tribes, dyed porcupine quills along the seams, with occasional bands painted across the breast and shoulders contributed to give elegance and denote rank or wealth. A pair of leggings reaching to the thighs, together with moccasins of pattern and material varying according to the tribe, and which were sewed to the leggings among the Loucheux and some eastern Dénés, completed the costume. In cold weather a robe of furs or a blanket of woven rabbit skins was at times thrown over the frock and kept round the waist by means of a belt furnished with a quantity of beaver teeth, bear or caribou claws or, in later times, thimbles and brass shells which produced in walking a jingling sound quite appreciated by the native ear.

For a head-dress the aborigines of the lower Mackenzie valley had a stripe of skin passing round the head as a bandeau, which was replaced in British Columbia by a cap usually made of small ground-hog skins. The skin of the head of a deer was formerly used for a like purpose, among the Chippewayans.

I must not forget their mittens, which, under such inclement climes, form quite an important part of their dress. They are of dressed skin, and usually hang from the neck by a skin cord passing over the shoulders, though with the primitive Chippewayans they were sometimes sewn to the sleeves of the coat.

#### IV.

As with the physical characteristics of the various tribes, so it is with their mental faculties; great divergencies tell of the deep influence of their environment. For manliness and other kindred qualities the Loucheux have no superiors among the Canadian Dénés, though they are treacherous enough towards their enemies and can be as cruel as any other redskins. They are more cleanly in their persons and, as a rule, more humane in their treatment of the women than most American aborigines. The Hares and Slaves are noted for

\*"Ten months among the Tents of the Tuski," p. 37. London, 1853.



their timidity, which is carried to the point of being ridiculous. This quality is, however, more or less shared by all the divisions of the Déné stock, whose members are living in constant distrust of one another, and especially of people of different tribes, whom they represent to themselves as continually lurking in the woods with evil designs.

None could lay claim to great natural veracity. Exaggeration or depreciation, according to the dictates of their personal interests, seem to be part and parcel of their very nature; but the Dog-Ribs and the Hare Indians deserve to be pointed out as absolutely devoid of any feeling of shame when detected in the act of lying, though no more scorching insult can be imagined for any Déné than the epithets liar and thief.

We may as well confess, however, that, when not spoiled by commerce with unprincipled whites, the members of all the tribes, except perhaps the Carriers and the Chilcotins, are remarkably honest, especially when dealing with representatives of their own tribal divisions. It is customary with them to leave on well beaten trails or cache up in the trees provisions, personal goods, traps, snares, snow-shoes and other property, which is there as safe as within the dwellings of the owner. On the other hand, I know of a Nahanaï who travelled twelve full miles through a thick forest, simply in order to return one bunch of matches which the white trader had given him, by mistake he thought, over and above what was due him.

The Dog-Rib and Hares are of a mild and rather indolent disposition, obliging and hospitable, in fact spending much of their time in dancing and singing. Nay, if we are to credit Sir John Franklin,\* the former are even noted for their kindness to the weaker sex, an attitude which is the more remarkable as it is rare among the Dénés. As to the Chippewayans, they are far from being so considerate in their ways towards women. Yet they are strongly religious, or rather superstitious, in temperament.

Within British Columbia, the Carriers are proud, touchy and naturally progressive, the Sékanais naïve, honest and credulous, the Babines loquacious and stubbornly attached to their ancestral customs, while the Chilcotins are energetic, violent and somewhat prone to profligacy.

Taken as a whole, however, it may be said that the Déné race within the limits of Canada is religiously inclined, of a timorous nature and kindly disposition, which, as usual in such cases, does not preclude occasional outbursts of anger, when the most revolting deeds may be committed. So timid, indeed, are these aborigines that, according to Sir John Richardson, not even the possession of fire-arms would embolden them "to risk an encounter with the Eskimo bowmen."†

While thus their mental activities appear to be dormant, their senses are highly developed. I remember reading that the keenness of the American Indian's senses had been greatly exaggerated. He that penned that remark could certainly not have been, like the present writer, travelling for over twenty years with individuals of that race, or he would have totally modified his opinion concerning the acuteness of its senses. A Déné will smell smoke for miles; I do not mean the smoke of a general conflagration in the for-

\*"Journey to the Shore of the Polar Sea," Vol. III., p. 49.

†"Arctic Searching Expedition," Vol. I., p. 212. London, 1851.

est, but merely of the lonely native's bivouac fire. His hearing is just as good. A slight rustle in the woods, the breaking of a twig under the feet of game will immediately draw his attention and make him stand up in his canoe in order to locate the exact seat of the disturbance and discover its cause.

As to his sight, it is that of the eagle. How many times have I not wondered at its incredible keenness when, exploring large lakes or mountains bare of timber, objects which my eyes refused absolutely to perceive were pointed out to me by hunters who could not understand what they were pleased to call my blindness! It is but fair to remark, however, that the Déné being preeminently a huntsman, he can hardly travel any distance without being constantly on the lookout for game. His piercing eye is constantly scrutinizing every nook of nature's primeval domain. "See, a grizzly bear passed here last night," he will exclaim when your attention may be engrossed with a philological or other problem. You look, and see nothing. But the child of the forest has noticed one or two blades of grass bent in the same direction at regular intervals, and his instinct prompts the proper deductions.

His memory is likewise very retentive, especially that form of the faculty which is known as local memory. "Here is a twig which was not broken when I passed here last," he will sometimes remark, or "somebody bent down the top of this sapling; so-and-so cut this piece of wood," etc.

Hence it is next to impossible for him to get lost even in the most intricate forest, especially if the sun is visible in the heavens, for its course is to him a very accurate compass as well as a clock which requires no repairing.

Few people have such a control over their emotions, and such power of exciting manifestations of emotions at will. While among themselves they will generally keep up a certain decorum and would not for anything pass for beggars, they generally consider the whites as a fair field for exploitation. They will then feign to perfection sickness, starvation, grief or any other feeling or situation which they think will be the most profitable to themselves. Hearne assures us that he "can affirm with truth he has seen some of them with one side of the face bathed in tears, while the other has exhibited a significant smile.\* I cannot say quite as much from personal observation, but I remember well having sometimes been affected by the cries and unmistakable signs of despair of females who burst into laughter as soon as they perceived that I was taking them seriously.

## V.

As to their morality, the lewdness of the Carrier women shortly after the establishment of the first trading posts could hardly be exaggerated, while Samuel Hearne declares of their sisters near Hudson Bay that "they are the mildest and most virtuous females he had seen in any part of America."† It should be remarked, however, that that explorer, who wrote a hundred and ten years ago of a journey performed long before, was the first white visitor to their country, a circumstance which implies no great benefiting effects of our civilization over primeval barbarism, as the compliment could pro-

\*"A Journey to the Northern Ocean," p. 308. Dublin, 1796.

†Ibid., p. 126.

bably not be repeated to-day with regard to the descendants of those women.

And yet, in spite of their good qualities, the temporary exchange of wives was not then deemed improper at all. It was rather considered the supreme token of friendship, an act of unsurpassed hospitality. The Copper Indians, or Yellow-Knives as they are now called, were less obliging. But that in their reserve with their guests a becoming regard for chastity was hardly their moving spirit is shown by the fact that, whenever they met any party of the meek Dog-Ribs, or Hares, they used to rob them of their women, a proceeding which, in 1823, occasioned an unexpected reprisal, when their whilom victims fell upon them unawares and cut off quite a number of them.\* Even cowardice can be transformed into courage, or at least treacherous activity, under the sting of incessant provocation.

This seizing of strange women recalls to mind a practice which was formerly universal among the eastern Dénés. Woman was then considered a prize which belonged by right to the strongest or most skilful pugilist. Whenever a man had set the eyes of covetousness on any female, he would challenge her mate or suitor to a duel, wherein wrestling decided her fate. This was not done in an unbecoming or unduly violent manner. The struggle was considered a matter of course under the circumstances, and the spectators would see to it that fair play was not wanting on either side, just as among more modern savages seconds are supposed to protect the rights of the duelists. Meanwhile the poor woman, who may have been really attached to her husband or may have secretly harbored strong preferences for another party, had to be a silent witness of the combat which was perhaps to launch her into the arms of a bully, who would deride the idea that her own tastes and inclinations might not improperly be consulted.

East of the Rocky Mountains, the same stigma which we have seen affecting the character of the Carrier women originally attached itself to the Chippewayan men, if Hearne's companions during his voyage to the Arctic Ocean may be taken as true representatives of their tribe. Brutal rapes and revolting incests seem to have been the order of the day, whenever they had an opportunity of gratifying their worst passions.

Their almost incredible lack of humanity to their own wives, who had to do all the hard work, even to the dragging of their heavily loaded toboggans on the day they had been delivered of a child, can only be compared to their cruelty to their enemies, or rather the poor hapless strangers they surprised in their sleep, before and after death. Their revolting deeds on such occasions stamp them as little above the station of the brute. Were not my space so limited, I should not refrain from reproducing the above mentioned traveller's entire description of the massacre of over twenty poor Eskimos by his own Chippewayan companions, especially of that girl of eighteen, who "fell down at (his) feet and twisted round (his) legs, so that it was with difficulty that (he) could disengage (himself) from her dying grasp.† One cannot but feel thankful for the influence of the Gospel

\*"A Narrative of the Discoveries on the North Coast of America," by Thomas Simpson, p. 318. London, 1843.

†"A Journey to the Northern Ocean," p. 154.



which has transformed the descendants of those miserable wretches into the considerate, virtuous and law-abiding Christians they are to-day.

## VI.

Another characteristic, a remarkable receptiveness or propensity for borrowing from foreigners supposedly higher in the social scale, is proper to all the Canadian Dénés. For that reason we must now give it a few moments' consideration.

This distinctive faculty probably flows from their natural timidity and consequent diffidence. The northern Dénés are pre-eminently meek, in the sense that they instinctively allow aliens to play over them the rôle of superiors, whose manners they must ape, and that they look upon them as models whom they must copy. To see the Dénés in their original guise, we must turn to the eastern tribes peopling the middle of this continent, where no neighbourhood of foreign races ever tempted them into altering their ways. Even then, however, should foreigners penetrate into their desolate country, those children of the soil immediately prove adept imitators, as Thomas Simpson noticed during his short stay among them. "I must not close this part of the narrative," he wrote in his account of the discoveries on the northern coast of the American continent, "without bestowing a just encomium on the generally docile character of the natives of Great Bear Lake. They soon became attached to the white men and are fond of imitating their manners."\*

The Dénés, uninfluenced by foreign contact, lived in semi-circular huts of coniferous boughs laid over a frame-work of stout poles, mere shelters, in fact, rather than even attempts at house building. Whenever practicable these shelters went in pairs, the second hut facing the first, so as to complete the circle, yet leaving sufficient room between the two for the fire-place, which was thus common to both. This arrangement had also the advantage of creating a draft in the proper direction and reducing to a minimum the quantity of smoke in the lodges themselves. It is still followed by the western Dénés of to-day when they camp out.

But their innate penchant for imitation soon led the Chippewans and the Beavers to adopt the skin-covered tepees of their southern neighbours, the Crees, and in the far west the same receptiveness made the Babines and the northern Carriers build large lodges with low walls and regular gables, accommodating several related families, such as those they saw among the Tsimshians of the Skeena River, while the southern Carriers and the Chilcotins took to underground houses after the manner of the Shuswaps. And as if it were necessary to accentuate the fact that the Déné tribes were indeed the borrowers, not the lenders, it so happened that those subterranean hovels, which seemed regular ovens, even in winter, were adopted, not by the people of the north, but by those of the south, where the climate is, of course, considerably milder. On the other hand, "the lodges of the Kutchin Loucheux resemble the Eskimo snow huts in shape and also the yourts of the Asiatic Chukchee."†

\*"A Narrative of the Discoveries on the North Coast of America," p. 243.

†"Journal of a Boat Voyage through Rupert's Land," by Sir John Richardson, vol. I., p. 393. London, 1851.

We have just mentioned the neighbours of the Eskimos. The characteristic acquisitiveness we are now studying can be demonstrated to the point of absolute certainty by reference to the technology of that tribe, which is conspicuous for its unusually independent and manly nature. Nevertheless the Loucheux have borrowed the peculiarly peaked shirts to which we have already alluded from the Eskimos.\* According to Richardson, they also have "the hose (or leggings) and shoes of the same piece, thus imitating the Eskimo boot, though with a different material."† Nay, even such a small detail as the particular shape of their sleighs marks them out as great imitators. All the other Déné tribes within Canada use, in connection with their winter travelling, the birch boards curved up in front widely known under the name of toboggan; but the Loucheux have long since adopted the regular sledges with separate runners and upright supports proper to their northern neighbors. All the students of Eskimo life are also familiar with the rude wooden goggles in use by the aborigines of the northern coast of this continent as a protection against snow-blindness. The Loucheux manufacture similar "spectacles," which have remained unknown to all the Déné tribes not in immediate contact with the Eskimos, though long, snowy winters are common to all of them.

Then we have the case of the Sarcees, who, according to the late Archbishop Taché, "have identified themselves with their allies (the Blackfeet) with whom they are now confounded as regards their manners and customs. . . . The Sarcees have lost the mildness, love of peace and honesty which characterize all the tribes of their race, and adopted the vindictiveness and thievish dispositions which are proper to the nation with which they are now mixed. This is so true, that Sir George Simpson calls them "the boldest of all the tribes that inhabit the plains."‡

They retain their own language, the one thing a Déné will never lose, but otherwise they are practically Blackfeet. They now have a sun dance like the Blackfeet, a ceremony in connection with tobacco growing and a thunder pipe ceremony borrowed from the Blackfeet even to the smallest details, and the myths current amongst them are much the same as those found among the Blackfeet and others.¶

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\*Petitot states (*Monographie des Dènè-Dindjié*, p. XXIX.) that this frock with tail-like appendages was the original costume of all the Dénés. In this the learned ethnographer evidently follows Archbishop Taché (p. 102 of his *Esquisse sur le Nord-Ouest de l'Amérique*) who tries to account for the name Chipeweyan by deriving it from two Cree words meaning pointed skin, or blanket. If both authors are correct in their surmise, their opinion does not impeach the truth of my own assertion. In that case, instead of one Déné tribe having adopted an alien costume, we will simply have to say that at least eight tribal divisions of that stock changed the shape of their outer garment, in order to conform to the style of the same prevailing among their southern neighbours. Within what is now British Columbia such pointed coats were never known, and S. Hearne does not mention any in his Journal.

†Ibid., vol. II., p. 11.

‡"Narrative of a Journey round the World," vol. I., p. 110. London, 1847.

¶These last details I owe to the kindness of Dr. P. E. Goddard, who lately visited the Sarcees in connection with an investigation relating to the distribution of types of Indian culture organized and planned by Dr. Boas, in order to repeat among them the researches he had already conducted in the reservation of the Hupas, another Déné tribe now living in northern California.

## VII.

The mode of disposing of the dead among the different tribes is another striking proof of their remarkable power of adaptation. The original custom of the family seems to have been to enclose the bodies within rough cratings made of small logs crossed at the ends, which were raised from three to seven feet above the ground on stout poles or posts, much after the manner of the scaffoldings whereon they cache their provisions and other household impedimenta. Any object which might have belonged to the deceased either accompanied him in his final retreat, or was cast into the water, burnt or cached in the branches of trees near by.

The Sékanais, who were surrounded on all sides by related tribes, in common with all the eastern bands so situated, acted thus in connection with influential hunters, though the former occasionally concealed the remains of their dear ones within trees hollowed out for the purpose. Simple plebeians, or people who enjoyed no special consideration, were simply left where they died, their fellows immediately lowering on their scarcely-cold bodies\* the shelters they had lived in, and moving on in their incessant peregrinations after game. In no case was cremation resorted to. But the Babines and Carriers had no sooner come in contact with the Skeena representatives of the Tsimshian stock, among whom the dead were cremated, than forsooth they commenced to burn the remains of those who fell out from among them. They even went so far as to erect as resting places for the small bones that would escape the ravages of fire those lofty funeral poles with square ornamented boxes so common along the coast of the northern Pacific.

As if to make still more patent the extraneousness of the practice among them and mix the old order of things with the new, the western branch of the Nahanaï tribe but lately used to deposit those charred remains within small travelling trunks set up on two or more poles in the woods, which were the equivalents of the original cratings mentioned above.† The eastern Nahanaï never practiced cremation.

In the beginning of last century, an irresistible instinct of imitation had even prompted some tribes to adopt, second-hand, the customs already borrowed by their own congeners; since Harmon, one of the first representatives of the Northwest Fur Trading Company in the west, tells us that the influence of the Carriers was leading the Sékanais to burn their dead.‡

As to the Chilcotins, they are neighbors of the Shuswaps, among whom the dead were always buried. Therefore the former had not

\*Fear of death and the necessity of following the migratory game on which the tribe almost exclusively subsists were the primary causes of that neglect. The same sense of self-preservation, which is innate in the lowliest savage as well as in the most highly cultivated Aryans, prompted the abandoning of old people whose state of decrepitude debarred them from taking part in the tribe's migrations. These were generally provided with fire, water and a few morsels of food, and left to die. In times of famine little children were similarly treated, when they did not meet with a still more horrible fate by their life being made to prolong that of their parents.

†Some of these can be seen even at the present day throughout the territory of the Nahanaï.

‡"A Journal of Voyages," p. 266. New York reprint of 1903.



failed to adopt interment as their national mode of disposing of bodies,

At the time of the first advent of the whites, the custom of erecting totemic columns with the heraldic coat-of-arms of the heads of clans whom they were intended to honor had already reached that portion of the Babine tribe, which had almost daily intercourse with the Tsimshian. The extension of this custom inland was only prevented by the advent of a still superior civilization.

We have already referred to the labrets worn by the Babine women. These supposed ornaments and the ceremonies which accompanied the assuming of the same by pubescent girls were also borrowed from their western neighbours of Tsimshian parentage. So that these observances might be considered as so many steps in the evolution of Déné custom and reliable gauges of the influence of aliens over those singularly receptive people. First we have the practice of erecting totemic poles; it was apparently the last noticed by the Dénés, or it did not appeal to them as very important, since it did not penetrate further than their villages on the Bulkley River, thus leaving a full half of the Babine tribe untouched. Then we see the use of labrets universal among the entire tribe, a sure token of an anterior adoption. Finally, cremation, with its attendant practises, ceremonial mourning and the enslaving of the widows, had already become general among both the Babines and the Carriers; whence we may fairly deduce the conclusion that those several customs had preceded the two others among the western Dénés.

The one practice which was original and proper to the tribe in which it obtained is that which was responsible for the distinctive name of the Carriers. For that reason it might not be out of place to enter into some details concerning its causes and results among those aborigines. But for the better understanding of the same, preliminary remarks touching other points of the Déné sociology, which betray the same receptiveness of the family, now become necessary.

## VIII.

First, as to the organization of society among them. The influence of environment, the particular occupation, or even the geographical situation of a tribe cannot fail to bear more or less on the mode of life prevalent among its members. Thus it is that, while the eastern Dénés are inveterate nomads, all the western divisions of the stock are semi-sedentary. They live in regular villages with habitations of a permanent character, which they periodically leave for their hunts after fur-bearing animals. The peculiar resources of the country they inhabit, no less than their innate penchant for imitation, are primarily responsible for these different social conditions. While the eastern tribes have to be constantly on the move after the migratory game on the flesh of which they mainly subsist, their congeners in the west have the resource of salmon, which they take in such quantities that, once properly dried, it becomes their daily bread, and allows a longer stay at home.

It has been said that matriarchy, or the fundamental law whereby the mother, instead of the father, is recognized as the head or basis of the family, on which depend the subdivisions of a tribe, the right of inheritance of the individual and the other functions inherent to agglomerations of human beings, is the principle after which

society was originally constituted. My own opinion, based on the study of the Déné and neighboring aborigines, would run counter to that idea. It seems to me that mother-right implies two particulars which point to a secondary condition of society: the gathering of numerous families into regular villages, and a consequent looseness of morals. The unit of primitive society must have been, if not the family as we understand it, at least the *paterfamilias*, as the natural head and protector of the children and women-folk. If living during a few generations, he would still have been regarded as the chief or patriarch of the group of related families.

On the other hand, matriarchy supposes a stage in the evolution of society when this has become demoralized by promiscuity to such an extent that the search after paternity is difficult and, in some cases, untruthful. The mother is then the only recognized source of all family ties, the only link which binds together individuals who would otherwise have no known blood relationship, and the basis of aggregates of families which cannot trace their kinship except through the female line; and here we have the tribal subdivisions usually called the clans. Now, it is well known that, with races not animated by high aspirations or guided by a pure ideal, too easy a social intercourse soon degenerates into undue familiarities and illicit commerce between the sexes. Such disorders, even if thought of, would hardly be possible among nomads or unimportant groups of related families leading, under the eyes of their patriarch, the simple life of primitive folks.

Be this as it may, the eastern Dénés, who pass their time roaming in bands with necessarily limited numbers through mount and vale, forest and barren grounds, know of no other fundamental law than patriarchy, while such of their western congeners as the Carriers, the Babines, and the westernmost Nahanaïs, who live in regularly constituted villages, had adopted matriarchy, with all its consequences, after the example of the coast Indians. Only the Chilcotins formed an exception to this rule. But in this they were only obeying the dictates of their national instinct, I mean the need of copying the social customs of their neighbours, the Salish and Kwakiutl races, which were both almost entirely governed by father-right.

## IX.

Most of the western Dénés are therefore divided into clans, among which succession to rank or property follows the female line. Members of those clans are supposed to be so intimately related to one another, to whichever village they may otherwise belong, that marriage between them is not to be thought of. In fact, this law of exogamy was formerly believed to be more binding than are with us the ties of blood relationship. First cousins married each other without any scruple if related only through the father's side; but no youth would ever dream of seeking the hand of a girl who was a perfect stranger to him if told that she belonged to the same clan as himself. On the other hand, a Babine from the far northwest, if chance brought him in contact with a clansfellow from, say Alexandria, 500 miles to the south, was sure of protection, hospitality and every mark of attachment, though Carrier and Babine might not before as much as have known of each other.

The headmen or representatives of these gentes were called *tæneza*, the men *par excellence*, by the Carriers and Babines, while among the Nahanaïs they were known under the name of *téné-thie*, or great men. They formed a privileged class of hereditary chiefs, on behalf of whom the hunting grounds were parcelled out as their lawful patrimony, over which nobody else had any right. They enjoyed a great consideration in the tribe, were respectfully listened to, and obeyed as far as consistent with a society which, in other respects, was little above the stage of savagery, and, on ceremonial occasions, they wore a special costume, occupied places of honor, that is, as far as possible from the doorway, and, if dancing or distributing presents, their appearance in the assembly elicited songs or chants proper to their title and handed down by their ancestors. Let us remark, however, in further confirmation of the little claim they had to originality, that the very words of these hereditary songs were nothing else than badly pronounced Tsimshian.

To them alone belonged the right of hunting on the lands of the clan, or special portions thereof, with the assistance of related families, which received only such a share in the spoils of the chase or trapping expedition as they were pleased to bestow. There were several such dignitaries in the same gens, and each bore a distinctive name, which was as denotive of the individual's rank as that of any European nobleman.\*

In fact, the whole institution had more points of similarities with the landed nobility of the old countries than with the modern class of tribal chiefs. The mental vision of the American aborigines is proverbially limited, and it hardly ever went beyond the notion of the clan as the maximum social unit. Hence chiefs in the present sense of the word never existed among the Dénés prior to the advent of the whites. Occasionally thrift and wealth, aggressiveness and mental superiority would raise an individual *tæneza* above his peers, especially if generosity was one of his virtues; but the chieftainship of a full tribe or even of a single village is with them of modern origin.

Even the children of such primitive noblemen shared in some degree the consideration enjoyed by their father. For that reason they were dubbed *æzkheza*, or the true children. But, as they belonged to the clan of their mother, which was necessarily different from that of their father, since the tribes were exogamous, they could not succeed to the rank or property of the latter. As the lands could not be expropriated in favour of a different gens, it followed that only a sister's son, or, this failing, one's own brother, or even sister, or a sister's daughter were the lawful heirs to the *tæneza*'s rank.

This last peculiarity accounts for the occasional female chiefs, or *t'sèkhuza*, among the western Dénés. In 1838-39, Robert Campbell, who established the first post in the upper basin of the Liard River, met such a chieftainness, who was of great help to him at a time when he was in sore distress. His fort had been destroyed

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\*Though the entire social system is unknown east of the Rocky Mountains, in several of the tribes there "the hunting-grounds descend by inheritance among the natives, and this right of property is rigidly enforced" ("Narrative of the Discoveries on the N. Coast of America," by Thos. Simpson, p. 75. London, 1843).



through the ill-will of the Tlingit of the coast, and his party were condemned to live on skin ropes and parchment at the rate of a meal a day, when he was succoured by the above mentioned female chief, whose kind-heartedness and influence perhaps prevented an even direr catastrophe.\*

## X.

Connected with the clans were sets of animals or other beings, which were supposed to have had in pristine times something to do with the establishment of those artificial divisions. They were regarded with a particular respect almost amounting to veneration, and, on festival occasions, they personified the whole clan and its members, whose symbol or crest they became. These were the well known totems.

Several kinds of these existed among the western Dénés, viz.: the gentile, the honorific, and the personal totems. Were it not that they are connected more with localities than with men, another class could be formed with those spirits whose functions seem to have been to preside over particular spots in the forest or along the lakes. These recall the *genii loci* of the Romans, and large rocks *in situ* were sacred to them, which every traveller had to honour by offering thereto a stone or a pebble as he passed by. I have seen myself that practice in actual force among the western Dénés, and Hearne speaks of some such rocks "which are covered by many thousands of small pebbles. . . . On its being observed to us that it was the universal custom for every one to add a stone to the heap, each of us took up a small stone to increase the number, for good luck."†

On the question of the primary origin or derivation of the two first kinds of totems I need not tarry, since there is not the shadow of a doubt that the Dénés owed their existence among them to the natives dwelling on the Pacific coast. The gentile totem, of course, represented the whole clan, while that which I call the honorific totem was restricted to some individuals. It was assumed, with befitting ceremonies and dances, by any person desirous of acquiring in society a rank to which he could not aspire in virtue of the laws of heredity.

As to the personal totem, it was common to both eastern and western Dénés, being as indigenous to them as most of the institutions in vogue among all the northern American Indians, since it was with them part and parcel of their religious system, shamanism, and had nothing to do with society as such. For that reason I cannot better explain its nature than by entering into some details concerning the theogony of these aborigines.

Although they hardly realize it themselves, the Canadian Dénés of all tribes originally believed in a twofold world: the one visible and purely material now inhabited by man, the other invisible, though in some way co-extensive with the first, which is the home of the spirits.

Of these there are two kinds, good and bad, all more or less under the control of the Supreme Being, whose personality and attributes

\*"Overland Journey Round the World," by Sir Geo. Simpson, vol. I., pp. 210-11. London, 147.

†"A Journey to the Northern Ocean," p. 132.

are not well defined. Some, as the Chippewayans, called him "he (or it) whereby the earth exists," or simply "the Powerful;" others, like the Hares, designated it under the name "*Enna-gu ini*," "he that sees before and after," while the prehistoric Carriers knew him as *Yuttære*, "that which is on high." The reader will please remember that these are all purely aboriginal names, in no way due to the whites or the missionaries. A clearer knowledge consequent on the ministrations of the latter caused them, in course of time, to be replaced by more appropriate terms.

What the exact essence of that Being was in the native mind would be hard to say, as the Indians themselves did not agree on that point. Sometimes it seemed to be confounded with the dynamic forces of nature, that which caused rain and snow, wind and the other celestial phenomena. That it was, however, a real entity, which they feared rather than loved or worshipped, is evident from the phrase, *Yuttære nyûzilht'sai*, "That-which-is-on-High heareth thee," which I am in a position to affirm was currently addressed to obstreperous or profligate people. The meaning was: keep quiet, behave yourself, if you do not want to draw on yourself the wrath of Him-who-is-on-High.

Beside the Supreme Being, there were, in the estimation of the Dénés, numerous spirits, mostly of a malefic character, which were supposed to lurk among them, animated by evil intentions. Should they ever come into immediate contact with man, the result was what we call disease, which, though sometimes invested with a concrete form not unlike the microbes of modern scientists, was always believed to be due to the action of hidden beings with nocuous properties.

## XI.

Alongside of these, however, was another class of spirits, which had on earth, in the animate or inanimate world, representatives wherein were embodied, as it were, some of their own marvelous powers over nature. In the estimation of the Dénés, and I think I may say practically of all the North American Indians, all the present entities in nature were at one time endowed with human-like faculties. Even trees spoke and worked and fought, and the fowls of the air and the animals of the earth were then men like ourselves, though possessed of potent virtues which are not ours. This magic, though now somewhat reduced in strength, has remained in the brute creation, and is the means whereby man can communicate with the spirit world, and by whose aid he is enabled to succeed in his quest after happiness and the necessities of life.

This is so true that even to-day, when the native's original notions have yielded before a superior theogony, his language, which is the one item perfectly immutable in him, has retained traces of those zootheistic ideas. If unsuccessful in his hunt after bear or beaver, the western Déné, even though animated with the most Christian sentiments, will not say: "I had no luck with bear or beaver," but "bear or beaver did not *want* me."

Now, those spirits, which are personified by the representatives of the vegetable or animal kingdoms, occasionally manifest themselves to man, and give evidence of their friendly dispositions by adopting individuals and protecting them through life, in return for some con-

sideration shown their present concrete forms or symbols. In a word, they are the link which connects man with the invisible world, and the only means of communing with the unseen: *these are the personal totems* of the Dénés, and, I cannot help thinking, of most of the American aborigines as well.

It has been said that totemism is a purely social institution. I feel absolutely no hesitation in denying this, in so far at least as the Dénés are concerned. Totemism among them is essentially and exclusively connected with their religious system, and I am inclined to believe that the gentile totem is nothing else than an extension to the entire clan of an institution which was originally restricted to the individual.

The personal totem revealed itself usually in dreams, when it appeared to its future *protégé* under the shape of the animal, etc., which was to be thenceforth his tutelary genius. Sometimes the totem animal was met in the woods under striking circumstances, and even at times went so far as to speak (?) to the Indian.

Thenceforth the most intimate connection existed between the two. The native would be careful to carry on his person and publicly expose in his lodge the spoils of that animal, its entire skin or part of it, which he would not suffer to be treated lightly. Occasionally he would even carve a rough representation of the totem. He would treasure any object—such as a stone or a vegetable excrescence,—between which and his totem he fancied he saw a striking resemblance. He would paint its form or symbol in bright vermilion on conspicuous rocks along lakes or rivers, etc. Under no circumstance would anything induce him wilfully to kill, or at least to eat the flesh of the being the prototype of which had become, as it were, sacred to him.

In times of need he would secretly invoke its assistance, saying: "May you do this or that to me!" Before an assault on his enemies or previous to his chase of large game, he would daub its symbol on his bow and arrows, and if success attended his efforts, he would sometimes thank it by destroying in its honor any piece of property on hand, food or clothing, or in later times tobacco, which he would throw into the water or cast into the fire as a sacrifice.

## XII.

So much for the personal totem and its relation to the individual. It sometimes happened that, instead of being simply revealed in a dream or in a quiet manner as just related, the totem spirit suddenly prostrated the native, who fell as if struck dead. Bystanders, if there were any, knew well the reason of the phenomenon. The prosaic Indo-European would have simply attributed the accident to a cataleptic stroke. Not so the American aborigine, however. According to his own psychological notions, the mind and soul of the smitten native had been attributed by some powerful totem spirit, with which he was evidently communing.

By loud chanting with rhythmical beating of drums the bystanders would seek to prevent that this interview with the denizens of the invisible world did not last a dangerously long time, and when the patient came to, he was looked upon with a consideration bordering



on awe. Ordinarily he had quite a story to tell of his visit to the home of the spirits. Should the attacks of his disease—I mean his excursions to the world of the unseen—prove of frequent occurrence, he would be treated with fear and trembling, and pronounced a powerful medicine-man or shaman. In the same way as contact with magnetism begets magnetism, it was evident to the simple mind of the aborigines that potent magical virtues were bound to be imparted through these repeated communings with the world of magic.

In that sense the shamanistic powers were but an extension or an exaggeration of the tutelary virtues inherent in the personal totem. The latter were for the individual alone; the former were intended for the benefit of others. When thus the mysterious forces of some powerful totem reposed in a member of the tribe, it was but natural that he should make use of them in order to counteract the influence of the malignant spirits whose presence caused sickness. Thus it was that disease was treated among the Dénés not only by the use of herbs, cauterizations and other remedies or surgical operations, but also and chiefly by the exertions of the shaman.

The hidden forces of which he was the proud possessor were called *cæn* in Carrier, a word which means at the same time magic and song, which circumstance reminds one of the ideas of the ancients on the same subject. They certainly seem to have had some similarity with those of the uncultivated people now under study. Chanting in rhythmic cadence was apparently reputed to have a sort of influence over nature not much short of that of magic, if we are to believe Virgilius when he sang:

*"Carmina vel cælo possunt deducere lunam."*

—(Bucol., Eglog. VIII.)

When the services of the adept in the magic art were called into requisition, the great protégé of the powerful totem divested himself of all his clothing, and donned the spoils of his own tutelary genius, a bear skin, the claws of a grizzly bear, the feathers of an owl, etc., and the ceremony commenced near the patient who was lying on the ground. While the assistants were beating vigorously their drums, the "doctor," with his rattle in hand—a hollow receptacle filled with sonorous pebbles, to which a short handle was attached—danced to the time imparted by the drummers. By dint of bodily efforts and the singing of a particular chant of his, whereby he strove to impose his will on the evil spirits in the patient, he worked himself to a state of frenzy which, at times, brought on himself additional attacks of catalepsy.

As soon as he had recovered, he would recommence his dancing and singing amidst the ever increasing tumult of the drummers and other assistants, who were now lustily taking up his own song. Then, receding a while from the patient, he would point to the prostrate form on the ground the image of his own genius or totem, wherewith he would exercise the evil spirits of his victim, all the time moving in his dance in his or her direction. Then, falling suddenly on the naked limbs of the sick, he would suck out therefrom either a diminutive reptile, a thorn, a stone, etc., which he would present to the gaze of the admiring assembly as the materialized form of the cause of the disease.

Another rôle played by the shaman among some western tribes, such as the Carriers and the Chilcotins, was that of father confessor.

I have long known of that particularly, but always refrained from mentioning it, out of fear lest I should seem to be drawing on my imagination. But Harmon, the very first author who lived among the Carriers, is very explicit on this point. "When the Carriers are severely sick," he writes, "they often think that they shall not recover unless they divulge to a priest or magician every crime which they may have committed, which has hitherto been kept secret. In such a case, they will make a full confession, and then they expect that their lives will be spared, for a time longer. But should they keep back a single crime, they as fully believe that they shall suffer almost instant death."\*

### XIII.

Conjuring remained, however, the main function of the shaman. This was of seven kinds among the Dénés. There was, first, the curative conjuring which I have already described. The second kind, preventive conjuring, I shall treat of in the next paragraph.

A third form of the art was inquisitive conjuring. I cannot find a better instance of it than in the following extract from my last book, which has reference to the loss and finding of the first iron axe ever possessed by a Carrier Indian. "The native chronicler goes on to relate how that shaman, who enjoyed a wonderful reputation even among his peers, had a personal totem or familiar genius, in the shape of a skunk-skin, which he wore hanging from his neck. This, during his trances, he used to press in his hands, when it emitted a piercing scream. On the occasion of Na'kwoel's loss, in the midst of dancing, singing and beating of drums, the shaman squeezed his skunk-skin, upon which it cried as if the animal had been alive, and, detaching itself from the neck of the medicine man, it made for the heap of boughs, wherein it plunged and remained for a while. When it came back, it bore in its mouth the lost adze blade!"†

Another circumstance, of much more frequent occurrence, called the same powers into play. Did any influential or greatly beloved person die? Nobody would think of attributing his or her demise to natural causes; but the friends or relations of the deceased would want to ascertain the name of the party who had brought his malefic gifts into play in order to encompass his or her death. The shaman was therefore consulted, who, in the midst of his dancing and singing, attired in all the glory of his usual paraphernalia, so as to be the more easily brought into direct communication with his totem, would suddenly fall down, feigning death or sleep, during which he was held to see through the machinations of the dead person's enemy. On resuming consciousness, he would unhesitatingly name the latter, and thereby in most cases pronounce his death warrant.

This brings us to the consideration of malefic conjuring, which is the fourth kind of shamanistic activities. This was much feared, and such as were supposed to be addicted thereto were but half safe among their fellows. Its use, real or imaginary, was the cause of many murders committed in retaliation for deaths attributed to the black art.

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\*"A Journal of Voyages," pp. 256-57.

†"Primitive Tribes and Pioneer Traders," p. 10 of third edition. Wm. Briggs, Toronto, 1905.

Intimately connected therewith, and yet different in the mode of exercising it, was witchcraft. This consisted in secret practices by ordinary mortals with a view to causing bodily harm to an absent enemy or injuring his possessions. Pieces of his attire, a lock of his hair, or if possible parings from his finger-nails, hidden in certain unlucky places, by the side of dreaded reptiles or their skins, amidst the muttering of imprecatory words, were reputed extremely efficacious in such cases.

Whether the victim of real witchcraft or of malefic incantations, the doomed individual, as soon as made aware of his dreadful position, almost invariably began to feel unwell. He would then gradually wither away and die in a short time. Such was—indeed, I should perhaps say such is the power of imagination with these timorous people!

A fifth kind of conjuring may be termed operative. It was intended chiefly to create good weather, make rain, bring on fair wind, hasten the annual run of salmon, or render it more abundant, remedy the barrenness of women, implant love in persons of different sex, etc. When the object of the incantations was of public utility, several shamans usually combined their efforts towards the attainment of the desired end.

There was, moreover, a sixth kind of conjuring, which was in reality nothing else than juggling or prestidigitation. It was at times resorted to in order to retain the shaman's hold on the admiration of the plebs, and still further increase faith in his ministrations. Marvellous deeds, such as the eating of fire, the swallowing and disgorging without any unpleasant effects of reputedly venomous reptiles, etc., were then accomplished in the sight of wondering natives.

In my recent work already referred to, I quote the case of a famous Babine shaman who "in the course of his religious dances, would introduce in his mouth the green, unmatured fruit of the *amelanchier* or service-berry, which, in the presence of all the spectators, would soon ripen to the extent of yielding a copious flow of dark juice."\*

The seventh and last kind of conjuring we will dignify by the name of prophetic. The epithet sufficiently explains its nature. What the reader will probably be more anxious to know is whether there ever was any actual sample of the genuine article among the Déné tribes. To this I cannot answer otherwise than by referring to the above mentioned Babine shaman. He was the founder of a kind of religion and the center of some sort of Messiah craze, and when his authority and prestige had been well established, not only within his own tribe, but even amongst the tribes of coast Indians, he set upon prophesying. All his surviving tribefellows, and even a trustworthy white lady who has mastered the Tsimshian language, assure me that in every case his prophecies were fulfilled, which fact, if really true, is so much the more extraordinary as he is reported to have even announced the introduction of the telegraph into his country, an institution of which the natives had not then the least idea.†

\*"Primitive Tribes and Pioneer Traders," p. 240 of third ed.

†Harmon himself says that "it is not uncommon for events to take place much as these conjurers predict." *Op. cit.*, p. 325.



## XIV.

I have left preventive conjuring out of its natural place because, to be properly understood, it requires more than a passing reference. To fully grasp its import we must penetrate still further into the intricacies of the Indian mind.

According to the primitive Dénés, man is made up of a perishable body and of a transformable soul, if soul this can really be called, which they knew as *nezæl*. This is almost equivalent to the *anima* of the Romans, inasmuch as it gives warmth and vitality to the body. However, etymologically speaking, it is rather the effect than the cause of life, since *nezæl* means at the same time human heat. In fact, though this word is used to-day to designate the soul as we understand it, it is possible that its signification was originally slightly different.

Besides this principle or physical condition, there was *netesen*, man's shadow, commonly called second self among us. This was a kind of double, a reflection of the individual personality, which was, of course, invisible in time of health, because then confined within its proper corporeal seat, but which, on the approach of sickness and death, wandered off the body and roamed about, seldom seen, but often heard, in the vicinity of its normal home. Its absence therefrom, if too prolonged, infallibly resulted in death.

The rôle of the shaman in such cases is easy to guess. His duty was to coax or force the truant soul to return to its proper seat. With this end in view, he would, in the evening, hang up the patient's moccasins previously stuffed with feather-down, and, on the following morning, should the down be warm, he would carefully put them back on his feet with the wandering shade therein. At other times, the simple imposition of the conjurer's hands on the patient's head, or silent ablutions of the weak parts of the body, with water endowed with magical properties through the manipulations of the conjurer, would have the same effect on the patient.

Should the exertions of the medicine man prove of no avail against the claims of nature, the soul or immortal personality of his patient—or victim—was then called *nezul*, in Carrier, a word which implies void and impalpability. It was supposed to embody what was left of man's previous self.

As to the fate of these shades after death, very little was known. The eastern Dénés believed them to be constantly erring in some underground world, where their occupations were not much different from those of their survivors on our sphere. Most of them live, they claimed, on fetuses, mice, toads and squirrels, while some, who are more fortunate, pass their time in fishing for small fry, visiting their nets in double canoes, or dancing together on the shores of the river.

According to the Carrier mythology, the shades inhabit some subterranean village beyond a large river, which they have to cross after a dismal voyage through snakes, toads and lizzards;\* but the fact that some of their homes—large board houses like those of the coast Indians—and half of the canoes used to ferry them across the river,

\*See my paper on "The Western Dénés." Proc. Can. Inst., 1889.

were painted red, the color of brightness and bliss, while the others were black, the token of bad feeling and of a spirit of revenge, would seem to indicate that their fate is unequal.

Most of these and other notions probably originated in the brains of some shamans who professed to have visited the land of the shades.

Before parting with this important personality in the Déné theologic system, we may as well ask ourselves what were the usual effects of its ministrations among the sick. Strange as it may seem, they were generally satisfactory. Hearne mentions two striking cases that fell under his observation,\*and my own experience and studies go to confirm the good results claimed for the shamans' conjuring. People will cease to wonder, when they take into consideration the extraordinary influence of the mind over the body, among credulous and naturally timid aborigines as the northern or Canadian Dénés are.

Of course, it did happen often enough that death claimed its own. In such cases the shaman had to build up as satisfactory as possible a theory as to the real causes of his failure, were it only to save his prestige in the tribe; but under no circumstances had he to return the generally valuable presents—dressed skins or ornamental shells—received in consideration of his labors. As to the relatives of the deceased generally sacrificing “the quack or some of his connections,” as Ross Cox declares† was done by the Carriers of British Columbia, there is absolutely no ground for that assertion.

## XV.

Unless otherwise noted, the foregoing applies to all the Déné tribes, irrespective of geographical location. We now come to the custom characteristic of the Carriers exclusively.

We suppose that a *taneza* or notable among them was evidently doomed. The hereditary chant denotive of his rank was taken up by a member of a different clan and continued by exo-gentile villagers until he expired, while his own relatives and clanfellows, especially the women, would rend the air with their lamentations. On the chief's demise, one or two young men of another clan were deputed to announce the sad tidings to neighboring villages, and invite their inhabitants to the incineration ceremonies.

In the meantime, daily dances by exo-clansmen would act as a diversion to the relatives' grief, while the poor widow, already shorn of her hair by the relatives of the deceased, would have to keep watch day and night by the body of her late husband.

On the great day of the funeral, in the presence of as large a concourse of people as could be secured, the remains were laid over a pile of dry wood, face upwards and painted as on festive occasions, while the rest of the body was covered with a robe of beaver skins and the feet encased in a new pair of moccasins.

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\*“A Journey from Prince of Wales' Fort,” pp. 194 and 219.

†“Adventures on the Columbia River,” p. 325. New York, 1832. It is but simple justice to the reader to warn him against the exaggerations and one-sided assertions of that author, or rather his informant, Jos. McGillivray, when he speaks of the Carriers. For instance, notwithstanding his explicit declarations, those Indians never practised scalping, except at the bidding of the whites among them.

Fire was now applied to the funeral pyre by an exo-clansman, who was paid on the spot for this service, while the widow was obliged by etiquette to hold in as long embrace as was possible under the circumstances the remains of her late husband. When the agony of pain arising from the violence of the fire or the suffocating smoke became unbearable, she was momentarily drawn off by her own relatives, but had soon to return to her post, until a fit of fainting would again part her therefrom. If her apparent earnestness in her endeavors to get burnt with the body did not satisfy the relations of the deceased, they would themselves jostle her into the furnace, thereby disfiguring her for life, with a view to diminishing her chances of remarriage, especially when she had not proved a model wife.

The garments of the dead once consumed, they were immediately replaced by others, skins or blankets, which were thrown over it by exo-clansmen, whose presents were carefully noted, as they had to be repaid in kind on subsequent occasions of a similar character, or in the midst of one of those ceremonial feasts of which I shall soon entertain the reader. Not unfrequently the shaman who had unsuccessfully treated the deceased adopted this expedient as a means of wiping out his shame, as they called it; but, of course, in this case this was an unrequited offering.

Shortly after the cremation of the remains, a bark shelter was erected on the spot, and the relatives of the deceased would pick up from among the ashes the few remaining bones, which they would enclose, first in a birch bark receptacle, and then in a leather satchel ornamented with fringes and suitable designs. This they would hand to the widow, who had thenceforth to *carry* it constantly on her back, or, at night, keep by her side. Hence the name of the tribe, which is but a translation of the *Arehlne* by which they are known of the Sékanais. This is the most notable of the few really aboriginal customs proper to a Déné tribe which I can recall to mind.

I will not expatiate on the terrible fate of the now enslaved widow, who had become part and parcel of the chattels belonging to the female relatives of the late *tæneza*. I also feel reluctant to repeat here what I have elsewhere written with full details\* concerning the series of ceremonial feasts which the maternal nephew of the deceased headman had to give to crowds of exo-clansmen, in order to be entitled to succeed to his rank, privileges and property. Yet these feasts, or potlatches as they were called from a Chinook word meaning "giving away," were of such importance in the eyes, not only of the Carriers, but even of all the western Dénés, who borrowed the entire social system from the coast Indians, that I must at least summarize that information for the benefit of such as may not have read my previous papers published by the Canadian Institute of Toronto.

## XVI.

These feasts were public distributions of dressed skins, eatables and other property by the people of one gens to the assembled members of other gentes. Apparently useless shows of vainglorious liberality on the part of the headmen, who seemed for the nonce to act as well deserving benefactors, they were withal nothing more or less than formal payments of debts contracted by the potlatching clan

\*"The Western Dénés," p. 147 *et seq.* Proc. Can. Inst., vol. XXV.



towards the present partakers of its bounties on the occasion of past feasts or public distributions. They might also be considered as letters-patent granted by and paid to the community, whereby the hunting grounds of a deceased "nobleman" were turned over to his lawful heir. The Dénés were eminently democratic in their social constitution; the assembled multitude of various clans, with their respective headmen, represented the highest authority amongst them, and these solemn assizes had for their principal object what was in their mind tantamount to the payment of the fees which, with more civilized nations, accompany succession to rank and landed estate.

A series of six feasts had generally to be gone through before this latter end was accomplished among the western Dénés. The first was called "the taking off the ashes," because the remains of the dead *tæneza* were supposed to be therewith removed from the fire-place, where they had theretofore been lying. It was given soon after his demise, and consisted mostly of a public repast followed by the distribution of dressed moose or cariboo skins, torn, in the gaze of the assistants, into strips of the dimension most convenient for making pairs of moccasins. Such as were intended for notables were always given twice the size of those that went to the *commune vulgus*.

The second potlatch took place some time afterwards, and was intended to celebrate the deposition in the place of honor of the remains of the late *tæneza*, though said remains might have been previously cremated.

The third was called "the imposition of feather-down." As among the coast tribes, this material was considered as distinctive of rank and honor. This feast was one of the most important of the whole series, and it was equivalent to the aspirant *tæneza's* elevation to the social status of his late maternal uncle. It was celebrated with an elaborate ceremonial, which lack of space prevents me from detailing.

The fourth potlatch was to honor the installation of the new headman in the traditional seat of his predecessor.

The fifth was simply an unostentatious meal given to bands of young men and notables, male and female, who entered, while dancing and singing, the lodge of the new "nobleman," whose last and most important feast was expected to take place within a short time.

This latter potlatch was a most elaborate affair, whose chief feature was the erection by the public of a large ceremonial house for the new *tæneza*. In the evening, two masked jesters would try to amuse the public by their antics, while the notables, dressed in their insignia, would dance on a kind of primitive stage. Prominent among these insignia were the ceremonial wig, a beautiful head-dress made out of the hair of three women tastefully plaited, with numbers of fine long shells (*Dentalium Indianorum*) inserted therein at regular intervals, or laid out side by side in complete rows; a long apron with a fringe decorated with many sonorous trinkets, and a breastplate cut in the shape of a wide crescent practically covered with the same precious shells.

The day after this dance took place a pantagruelistic repast, during which the bones of the late *tæneza* were taken from the back of the widow, who was then presented with a new blanket and publicly declared free to remarry.

The third day of that feast might have been called shaman day, inasmuch as those possessed of magical powers then used the same for the benefit of the whole assembly. Then took place the great distribution of clothing, blankets, etc., and the guests were obliged by custom to offer the rudely carved image of the totem of the host's clan any piece of property with which they might choose to present the new *tæneza*, and through him his entire clan. Due count of these was as usual taken and carefully remembered for compensation on a future occasion of similar import.

## XVII.

I have mentioned dances. They were as rude and unartistic affairs as could well be devised. Among the Carriers they consisted mostly of jumps and leaps with both feet simultaneously, to the time of one or two drums or tambourines, accompanied by a phrase repeated *ad nauseam*, with meaningless monosyllables sung out to the tune of the weirdest imaginable melody. With the Sékanais, their immediate neighbors in the north-east, the motions of the legs were not so much in evidence, and were sometimes entirely replaced by alternate sets of two or three jerks of the shoulders to the right and to the left.

Sun, or strictly religious, dances were unknown among the Canadian Dénés.\* The nearest approach thereto was that practiced on the occasion of an eclipse. To hasten the reappearance of the luminary, they would silently emerge from their lodges, and then, ranging themselves in single file, they would start a sort of propitiatory dance. To this effect, bending under an imaginary burden, though packing only an empty bark vessel, they would strike in cadence their right thigh, repeating in piteous tones, *hanaintaih, qé!* Come back, oh, do!

Ceremonial dances, such as that noticed in the preceding paragraph, were usually performed either on a stage or in a free place within a large lodge by one or two men, rarely by any woman, unless she be a titled noble woman. Common, or simply pleasure dances would be started almost anywhere by people of either sex. In these the dancers moved in circles.

Among the eastern Dénés, the Dog-Ribs were considered the master-dancers of the family. Yet, that their art was not any too remarkable for its gracefulness is shown by this quotation from Sir Alex. Mackenzie's journal, who witnessed one of their dances when he first met them in 1789: "The men and women formed a promiscuous ring. The former had a bone dagger or piece of stick between the fingers of the right hand, which they kept extended above the head, in continual motion; the left they seldom raise so high, but work it backwards in a horizontal direction, while they leap about and throw themselves into various antic postures, to the measure of their music, always bringing their heels close to each other at every pause. The men occasionally howl in imitation of some animal, and he who continues this violent exercise for the longest period appears to be considered the best performer. The women suffer their arms to hang as without the power of motion."†

\*Except among the Sarcees, who are far from being typical Dénés.

†"Journal of a Voyage," vol. I., pp. 233-34.

A common occasion for an impromptu dance was until recently the meeting of parties representing different tribes. The Dog-Ribs, Loucheux, Carriers and Chilcotins are on record as following that custom, which amounted as much to a mark of deference as to a token of friendship. This is evident from the fact that, when the leader of a Chilcotin party of marauders who had just massacred almost the entire population of a Carrier village fell in with the chief of the latter, accidentally reduced to a state of utter helplessness, the victorious Chilcotin asked his rival to "dance for him."\*

On such occasions "the two bands commence the dance with their backs turned to each other, the individuals following one another in Indian file, and holding the bow in the left hand, and an arrow in the right. They approach obliquely, after many turns, and when the two lines are closely back to back, they feign to see each other for the first time, and the bow is instantly transferred to the right hand and the arrow to the left, signifying that it is not their intention to employ them against their friends. At a fort they use feathers instead of bows."†

Generally of a most indolent disposition, and with plenty of leisure when not pressed by famine, the Dénés were naturally not deficient in games wherewith to while away their time. The scope of this paper will not allow of more than a mere enumeration of them. Among the Carriers *atiyéh*, which was played with circular pieces of bone, was based on the principle of the modern dice. *Atlih* necessitated the use of a number of slender bone sticks, a few inches long. Both have become obsolete. This cannot be said of what I will call the "hand-game," from two more or less polished bone-sticks held in the hands, while a band of Indians execute a song proper to the game. Winning depends solely upon a successful guess as to the hand into which the peculiarly marked stick has been surreptitiously transferred.

These are games of chance, and are played anywhere and at any time, though innumerable nights, especially, are made hideous by the tumult and revelry which the last game usually entails. This is so absorbing to the native mind that many a Déné has been thereby despoiled of all his belongings. Other games there are in which personal skill, or a certain degree of exertion, are the chief factors. Besides lacrosse, which seems to have been known long before the advent of the whites and is responsible for the name of an important locality—Isle-à-la-Crosse—within Chippewyan territory, the most popular among the western Dénés is *tætquh*, which is played with slender sticks, four or five feet long, thrown out through the air, the distance reached determining the winner. Its equivalent in winter time is *næzaz*, which is also the name of the finely polished wooden rod, with a sort of elliptical head, which is launched on the frozen surface of the snow. Two rival teams, composed sometimes of half a dozen men or boys, are then in the field, and the largest aggregate of points gained indicate the winning side.

Another game of a quieter character is *tæ'ko*. It is played mostly by the fireside, during the long winter evenings, with a blunt-headed

\*"History of the Northern Interior of B.C.," p. 15. Wm. Briggs, Toronto.

†"Journey to the Shores of the Polar Sea," by Sir J. Franklin, vol. III., p. 50.



stick sent by two partners sitting opposite to one another, against thin, springy boards firmly set in the ground near each player. When one of these is struck so dexterously that the stick bounds back to the knees of the party who threw it, the latter is entitled to recommence until luck ceases to favor him.

This is of too childish a character to suit the lively disposition of most Dénés, who prefer arrow-shooting by two competing bands taking as a target a rolling disk or wheel of willow bark. The arrows which go home become the stake which the rival team has to win over by hitting the disk now hung up on a stick.

### XVIII.

But, though little more than a grown-up child, even when well up in years, the Déné has to live, and therefore to work, at least occasionally. With no absolutely sedentary status, and forming an embryo society with ranks too thin to warrant or require a distribution of labor among differently endowed individuals, any great diversity of avocations cannot be thought of in his case. In fact, his occupations may be said to be reduced to hunting, fishing and gathering berries or roots, and, in this respect, practically every family is on the same footing. Hunting is exclusively the men's work; fishing, mostly the women's, and berry collecting entirely so.

Hunting may be considered under two heads: hunting proper, or the chase of the larger game, and trapping or snaring. To this division corresponds closely enough that of venison and fur animals. The former are moose (*Alce americanus*), cariboo (*Rangifer caribou*, and, east of the Rocky Mountains, *R. groenlandicus*, or barren ground cariboo), the musk-ox (*Ovibos moschatus*); while, on the same range, or exclusively to the west thereof, are to be found the mountain goat (*Capra americana*), the mountain sheep (*Ovis montana*), and the mule deer (*Cariacus macrotis*). These were originally dispatched with strong bows, and arrows usually fletched with three half feathers, and tipped with augite-porphyrity, obsidian, or impure quartz, though sometimes also with bone.

While the task of chasing game is within man's province, it is reserved to woman, as the beast of burden and factotum of the family, to fetch home and dry its meat. For this purpose it is neatly carved into thin and very long slices, which are suspended on transversal poles by the fire-side. In the east these were afterwards pounded fine and mixed with grease or marrow, under the name of pemmican, a preparation which does not seem to have ever been extensively introduced west of the Rocky Mountains.

As adjuncts to winter hunting and travelling, all the Canadian Dénés have snowshoes, which vary in pattern and finish according to the tribe which makes them. The Sékanais snowshoe is abnormally long, as it is sometimes used as a sliding sleigh while descending the precipitous slopes of their mountains. The eastern snowshoe is chiefly remarkable for its uneven sides, the outer stick of each bulging out, so that they cannot be more easily interchanged than modern shoes. Its Louchoux equivalent is long and very broad in front. Almost all the Déné models are curved up in their fore-parts, which are sometimes pointed and made of two sticks, and sometimes round, or rather elliptical, being made of only one stick.

Among those tribes which subsisted principally on deer or cariboo, pounds with avenues of stout sticks or trees leading thereto were formerly erected, at the cost of much labor. Therein whole herds of animals were driven and finally slaughtered.

It would be too long and foreign to my purpose to describe the various devices resorted to by the Canadian Dénés with a view to entrapping or ensnaring bears and the minor fur-bearing animals. I must be allowed to refer the reader to my "Notes on the Western Dénés," pp. 93-104, where he will find a full description of the same. I will simply remark, as a token of that people's regard for continence, that, among the Carriers, a married man separated *a thoro* from his wife a full month prior to setting his traps or snares, during which time he led a sort of penitential life intended to secure good luck for his forthcoming efforts.

If eminently huntsmen and trappers, the Dénés are also, and perhaps to a still greater extent, fishermen. In fact, among the western tribes, salmon may be said to be the staple food for old and young. Three or four species of that fish annually ascend the rivers emptying into the Pacific and their tributaries, but *Oncorhynchus nerka* is the only one dried for later use, on account of its well-known gregariousness and excellent keeping qualities. Several contrivances, too numerous to describe in detail, are used, according to the nature of the localities. Whenever possible, the streams are staked across as in northeastern Asia and provided with weirs leaving access, every few feet, to openings in the trellis work leading to basket-like traps from which escape is impossible. Enormous quantities of the fish are usually secured every year.

Salmon is not found within the basin of the Arctic Ocean. It is replaced to some extent among the eastern Dénés by many varieties of minor fish, prime among which is the coregone, or whitefish (*C. transmontanus*) and several species of trout. When taken in the beginning of the winter, the former is allowed to freeze, after which it is considered a great delicacy. Nets of various sizes, which were originally of the fibres of nettle (*Urtica Lyallii*) and willow (*Salix longifolia*), are usually the means of catching that and any smaller fish, though spearing and hook-fishing are also quite often resorted to. But among the Yukon Loucheux who, if we are to believe Sir John Richardson,† were till his time unacquainted with nets, weirs with wicker baskets were the only means of procuring whitefish.

## XIX.

This, as well as salmon and smaller fry, is ordinarily boiled without salt or any seasoning, or roasted by the fireside. But when the Carriers of old wanted a really palatable dish, they buried their salmon in the ground until it reached a state of semi-putrefaction, when it was mixed with more or less rancid oil, originally extracted from the heads of the same fish. If a few dried berries were added to the compound, it was considered the *nec plus ultra* of table delicacies.

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\*"Transactions of the Can. Institute," vol. IV. Toronto, 1894.

†"Arctic Searching Expedition," vol. I., p. 390.

Their berries, as a matter of course, greatly vary according to the territory of the tribes. They are mostly of the *Viburnum*, *Vaccinium* and *Empetrum* genera, though, to the Carriers, for instance, there is nothing like the fruit of the *Amelanchier alnifolia* for economic importance in the vegetable kingdom. They gather it in immense quantities in bark vessels, and compress it into thin cakes which, properly dried, will keep for quite a long time. The soap-berry (*Shepherdia canadensis*), and several other berries or roots, prove also valued additions to their larders.

Prominent among the latter in the eyes of most of the tribes is the root of the red lily (*Lilium columbianum*), which is appreciated as an article of diet even by the natives of northeastern Asia. The Chilcotins prefer two tubers which they call, respectively, *nuntí* and *æsrónh*. These are small, and spheroidal or oblong, somewhat of the form of potatoes, which their women dig up in large quantities.

All the vessels of the prehistoric Dénés were made, without much art, of birch bark, sewed with the fibrous rootlets of the black spruce (*Abies nigra*). They have to this day remained unchanged as to shape or material except among the Chilcotins, who do woven basketry as their Salish neighbors in the south. As a matter of course, the original bark kettles have long been discarded in favor of the tin kettles of commerce. The process of boiling by means of hot stones thrown into a vessel full of water, though abandoned when the white man's wares were adopted, has not, however, entirely disappeared from among all the tribes. The Carriers have still recourse to it when cooking their service-berries.

It is a long way from berry gathering or cooking to war. But, since we have mentioned the use of bows and arrows, it is, perhaps, natural that we end this paragraph by a few words on that subject. War among the Dénés was but a series of ambushes and surprises, resulting when circumstances were favorable to the attacking party, in general massacres. Women and children fell victims to the aggressors' rage just as well as the men; but in some cases the former were spared in so far as their lives were concerned. They were then taken prisoners, and almost invariably became the wives of the leading men among the attacking party. In too many cases the most barbarous cruelties were exercised against the fallen foes, whose bodies were horribly mutilated.

But the two first chapters of my "History of the Northern Interior of British Columbia," which relate with full particulars well authenticated war expeditions among the Carriers and the Chilcotins, will enlighten the reader on this subject better than any didactic treatise on the same could do. Suffice it to add that the war-bow of several prehistoric tribes was usually furnished with one, sometimes two, stone or bone points, which allowed of the weapon being used as a spear when shooting had become impossible. Two kinds of armour, one of stiffened skin, the other of rods tied together, were also in use among the western Dénés. Moreover, the Carriers, at least, knew of the shield, which they called—indicating thereby its material—'*kei-lla-thæn*, or "amelanchier which is held by the hand.



## XX.

We will close this compendium of Déné ethnology and sociology by a few remarks on woman, and her place in the primitive society of these aborigines. Though, as we have seen, her condition in a few tribes was bearable, we may safely assert that, in general, it was humble and lowly, nay, we should say miserable. Some authors, in these latter times, have striven to react against the common and very just idea of her pitiful state in barbarous societies, such as that of the northern American Indians. They have quoted well authenticated cases of regard for individuals of her sex, and even instances when some of them have attained rank and consideration in their tribes. In particular, the female chief who practically saved Robert Campbell's life among the Nahanaïs has been represented as a splendid exemplification of the power of woman in aboriginal society. As I intend writing for the Congress of Americanists a paper specially devoted to the treatment of this very question, I shall content myself with remarking here that those authors simply confound the exigencies of tribal organization with the status of woman as woman.

As we have already noted in the course of this essay, the laws which govern inheritance preventing the expropriation of land from one clan to another, they occasionally forced the tribes to confer on women titles and privileges which went by right to men. Such cases invariably predicated the absence of any suitable male heir, and did not affect the standing of woman as daughter, wife or mother. In other words, if these exceptional circumstances rendered her lot more tolerable, this was simply owing to social necessities, but not, as amongst us, because the titular happened to belong to the weaker sex. Marks of deference were, indeed, paid her in public, but there was very little chivalry in this; in the privacy of the family life she became a woman again, that is, an inferior human being, whose duty it was to do all the menial work by the lodge or tepee, unless her special rank and private circumstances furnished her with attendants to replace her in the discharge of her household duties.

Among all the Déné and most other American tribes, hardly any other being was the object of so much dread as a menstruating woman. As soon as signs of that condition made themselves apparent in a young girl she was carefully segregated from all but female company, and had to live by herself in a small hut away from the gaze of the villagers or of the male members of the roving band. While in that awful state, she had to abstain from touching anything belonging to man, or the spoils of any venison or other animal, lest she would thereby pollute the same, and condemn the hunters to failure, owing to the anger of the game thus slighted. Dried fish formed her diet, and cold water, absorbed through a drinking tube, was her only beverage. Moreover, as the very sight of her was dangerous to society, a special skin bonnet, with fringes falling over her face down to her breast, hid her from the public gaze, even some time after she had recovered her normal state.

This had also another purpose. It replaced with our Indians the common houses for pubescent girls which obtain among some of the aboriginal tribes of the Philippine Islands, in that sense that it

announced the fact that the wearer of it was now in the ranks of marriageable parties.

With some of the eastern tribes girls were betrothed from their infancy by their parents, but among most of the western Dénés the young man had to work quite a period of time for his intended bride's parents. In the northeast, as we have seen, wrestling decided the fate of a maiden. Some cases are also on record in connection where-with goods and property were the only consideration determining a match; in other words, the woman was then the object of a regular bargain. In no case was there any marriage ceremony; the young man simply took the girl to a new tepee and lived with her as husband and wife, or, as among the Carriers, he settled with her in a corner of the large lodge of his father-in-law.

Polygamy was prevalent everywhere, but, except in the cases of very good hunters or of prominent members of the tribe, few men had more than two wives. I know of a chief who had four, and Hearne mentions another who had eight. Divorce was also common enough, especially when the woman had proved barren, lazy, or self-assertive. Cases of independence, however, were exceedingly scarce, and all the early explorers were struck with the down-hearted countenance and humble behavior of the Déné wives.

Every recurring menstruation brought about a temporary separation *a thoro*, and this naturally followed also child-births. Parturition was generally easy enough, though even in the early times painful confinements occasionally happened. If in the woods or traveling, the poor mother was not on that account treated with any more feeling or humanity, but had to proceed with the drudgery of her daily life, while packing her new-born on her back.

In case of any one losing her husband, the wife had to follow the laws of the levirate, and marry her surviving brother-in-law. Many other directions of the Mosaic code were also in vigor among the original Dénés and not a few of their modern descendants. I leave it to my previous papers to detail the same.

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## 9. THE SALISH TRIBES OF THE INTERIOR OF BRITISH COLUMBIA.

BY FRANZ BOAS.

The interior of British Columbia is inhabited by Salish tribes and by the Chilcotin and other Athapaskan tribes. Their culture resembles to a certain extent that of the northern Athapaskan tribes in its simplicity, and is also allied to that of the tribes of the plateaus farther to the south. It differs fundamentally from the culture of the tribes of the north Pacific coast, and is also quite different from that of the Indians of the Plains, although certain traits of culture have been imported from both sources.

The Indians of this region are hunters and fishermen. Salmon, which ascend the large rivers, are an important staple food; but, besides this, deer and other mammals are hunted, and are infinitely more important in the domestic economy of the people than they are among the coast tribes. The people also gather large quantities of roots and berries, and for this reason their habitations are changed from season to season, according to their pursuits. During the fishing season they live in the river valleys, where the permanent villages are located; while during the hunting season and root-gathering season they live in the mountains. Since the lower part of the country is dry, and wood is not plentiful, the wood industry, which is so characteristic of the coast Indians, is only slightly developed. Stone implements are made both by battering and flaking. Jade axes and adzes are of frequent occurrence. The art of painting is only slightly developed. Clothing is made principally of deer-skin which is carefully prepared. The clothing is much fuller than it is among the coast tribes, moccasins, leggings, breech-clouts and various types of shirts being worn. The head is covered with a cap or with a head-band. Besides deer-skin clothing, woven blankets and ponchos made of sage-brush bark, are also in use. The weaving is done by a simple process of twining around strands of shredded bark. The tribes of the Coast Range have a highly developed art of basketry. They make beautiful coiled ware with designs produced by imbrication. These coiled baskets are generally angular in shape, and suggest that the type was developed from bark baskets and boxes. Bark basketry is found principally among the more eastern tribes of this region. Mats, baskets and pouches are also made by twining, the material used being rush and Indian-hemp fibre. Blankets of strips of rabbit-skin are also made by twined weaving.

The permanent house is a semi-subterranean lodge, consisting of a large, round excavation over which a conical roof is built. The entrance to the dwelling is through the smoke-hole in the middle of the roof by means of a ladder consisting of a notched tree. In summer the people live in round or square tents of varying construction, differing, however, in type from the skin tent of the Plains Indians. The tents are generally covered with rush mats; while, on the other hand, in the mountains the simple lean-to is used. The double lean-to, which is so characteristic of the Athapasean tribes, is found throughout this area.

In the ornamentation of dress, feathers are much more important than among the coast tribes, and they are treated in much the same fashion as by the Plains Indians. Nose and ear ornaments of dentalia and beads are commonly used.

The bow is partly of the some type as that found on the coast, being flat in cross-section with round grip in the middle; but by far the greatest number of their bows are of the characteristic sinew-backed type of the plateau area. Arrows with simple stone points and with barbed bone points are used. Deer and small game are often trapped in snares. Fences were also built at appropriate places to drive the deer in the direction of the hunter. Fish are caught, partly in fish-traps, partly by means of bag-nets, which are used from rocks near the banks of the river, or from platforms built over the water. Hooks and fish-spears are also used. In travelling on the rivers, both dug-



outs and bark canoes are used. The bark canoe has long spurs under the water line, and is made of spruce bark.

In warfare the bow and arrow, lances, knives and various forms of clubs are employed. The war-club with loose stone encased in hide, which is characteristic of the Plains Indians, is found here also. For protection, slat and rod armor was used.

Some of the games are almost identical with those played by the coast Indians, while others resemble those played by the Indians of the Plains. To the former group belong the beaver-teeth dice and the painted gambling-sticks. The well-known hoop-and-spear game is found here also. The game of hiding-the-button is played in the same manner as on the coast. On the other hand, some of the ball games—for instance, a kind of lacrosse—resemble very much the ball games of the Plains.

The decorative art of the plateau Indians is very slightly developed. It is probable that in former times there may have been a more marked development of designs produced by means of embroidery, but these no longer survive. There is almost a complete absence of works of plastic art. Among the archæological remains of this region, which, without any doubt, belong to the ancestors of the present inhabitants of the area, are found a few good carvings in bone, and fairly good realistic representations on stone mortars. These, however, are very few in number. In type they resemble somewhat the plastic art of the coast, but the small number of specimens shows clearly that these objects must always have been rare. Painting is also of a very crude character. A number of highly conventionalized designs are found, which are interpreted in accordance with the general ideas prevailing among the people. Some of these designs consist of simple lines and dots. They are, probably, the oldest type of decorative design of these tribes. Other designs seem to be related to those of the Prairie Indians. This is also suggested by the fact that these designs occur on a few painted pouches and parfleches that are found here. Most of them are angular and consist of rectangles and triangles. By far the bulk of the painted designs are pictographic in character, and are related to the characteristic pictographic art of the Plains Indians. In a few cases very simple forms are interpreted in a symbolic manner. Thus a red dot on a round stone club has been interpreted as a thunder-bird in the sky, and a cross as the world with its four corners. There is practically no trace of the semi-realistic animal representations which are so characteristic of the Pacific coast.

The social organization of the tribes is very loose. There is no recognized tribal unit, and the population of the villages undergoes frequent and considerable changes. There are no exogamic groups, and no hereditary nobility is found. Distinction was obtained principally by wealth and wisdom. Captives made in war became slaves, but if one of the slave women was married to a member of the tribe she and her children were considered equals of the other people. It does not seem that names were restricted to certain families, although names of ancestors were frequently given to young children. In marriage the wife generally followed her husband to live with his family, although shortly after marriage there was a frequent change of resi-

dence of the young people, who for some time lived with the bride's family, and for some time with the groom's family.

The hunting territory was considered the common property of the whole tribe, but deer-fences and fishing-places were the property of certain individuals and families. In most cases an old woman was put in charge of berry-patches, which were the property of the whole tribe. It was her duty to prevent any one from picking berries before they were ripe.

In recent times the custom of giving potlatches has been introduced among the more western plateau tribes, the custom evidently being copied from the coast tribes.

In the western part of the country the infant cradles were shaped like small baskets, and resembled somewhat the infant cradles of the coast. Farther to the east the characteristic North American cradle-board was used.

A young man who desired to marry gave presents to the girl's parents, and their acceptance indicated the acceptance of his suit. In other cases the girl's relatives proposed marriage to the parents of the young man. Levirate was common.

The body of the deceased was buried, the grave being purified by means of thorny bushes to drive away evil spirits, and often tents were erected over the burial-site. If a person died in a foreign country the body was burned and the remains were wrapped up and carried along to be buried in the family graveyard, each family having a burial site of its own. Among the Lower Thompson Indians and Lillooet the burial customs were somewhat similar to those of the coast tribes. In many cases the bodies were placed in large cedar boxes supported on posts. The bodies of members of one family were placed in the same box. It is worth mentioning that terms of affinity undergo a change after the death of husband or wife.

The religious concepts of the Salish tribes of the interior were also much simpler than those of the coast Indians. Since the social organization is simple, and ritualistic societies are not found, the whole group of ideas connected with these concepts does not occur. The essential trait of the religious beliefs of these tribes is connected with the acquisition of guardian spirits. Each person is believed to have his guardian spirit, which is acquired by the performance of ceremonials. Only a few shamans are believed to have inherited their guardian spirits from their parents who have been particularly powerful. All animals and objects possessed of mysterious powers can become guardian spirits, whose powers are somewhat differentiated. Objects referring to death—such as graves, bones, teeth, and also natural phenomena, such as blue sky, east and west, and powerful animals—could become guardian spirits of shamans. Warriors had weapons and strong animals for their guardian spirits; hunters: the water, the tops of mountains, and the animals they hunted, or others that were themselves successful hunters. Fishermen had for their guardian spirits canoes, paddles and water animals; and gamblers: a variety of smaller animals, and also objects used for securing good luck or wealth. The frequent occurrence of guardian spirits that are only part of an animal—as a deer's nose, the left or right side of a thing, the head, the hand, the hair, or the tail of an animal—is remarkable.

The puberty ceremonials during which these guardian spirits were acquired were quite complex, and the ceremonies which boys had to perform depended upon their preferences. Those who desired to become great hunters had to practise hunting and shooting in a ceremonial way. Those who desired to be warriors prayed to the sun to give them their wish, and had to perform mimic battles. The would-be gambler danced, and played with gambling-sticks. One of the important rites connected with these ceremonies, as well as with all other ceremonies, was purification by means of the sweat-bath. In every village there were a number of small lodges, consisting of supple poles bent, and tied together in the middle, and covered over. These were used very frequently by the people.

The puberty ceremonials of girls were much more complicated than those of boys. Girls were forbidden to touch their bodies with their hands, and for this reason had scratchers and drinking tubes which they had to use through the whole ceremonial. They were isolated, and during the period of isolation they had to dig trenches, pick off leaves from fir branches, and make baskets and small mats—all symbolic of the work they had to do later in life, and intended to give them strength. Girls as well as boys made records of the offerings and ceremonies they had passed through by means of pictures painted with red paint on boulders. Generally the period of isolation of boys and of girls extended over several months.

Every living person, all animals, and even inanimate objects, are said to have souls. The Thompson Indians believe that each soul has a shadow which remains behind in this world, while the soul itself goes to the country of the ghosts, which is believed to be situated in the west, and which is guarded by a number of spirits that may turn back the soul of a person who has fainted, and who is not ready to die.

The mythology of the tribes of the interior centres around Coyote. The Thompson Indians, whose beliefs are best known to us, believe the earth to be square, the corners directed towards the points of the compass. The confluence of the Fraser and Thompson Rivers is believed to be the centre of the world, which is perfectly level in the centre, but very mountainous near the outer edge. It is surrounded by lakes over which hover clouds and mists.

Mountains and valleys were given their present form by a number of transformers who travelled over the world. The greatest of these was the Old Coyote, who, it was said, was sent by the "Old Man" to put the world in order. At the same time there were other transformers who travelled all over the world working miracles. It is said that Coyote finally disappeared, and retreated to his house of ice. The beings who inhabited the world during the mythological age, until the time of the transformers, were men with animal characteristics, gifted in magic. They were finally transformed into real animals. Most of the rocks and boulders of remarkable shape are considered as transformed men or animals of the mythological period.

The coyote legends of this area have the characteristics of the coyote cycle of the whole North American plateau district. The coyote is believed to be the ancestor of some of the tribes, and was the only person to survive the deluge. Most of the stories related of him deal with his greed and covetousness, and belong to the characteristic American trickster stories. One of the most famous of these tradi-



tions tells how Coyote coveted his son's wives, and induced his son to climb a tree. By lifting his eyelids, Coyote caused the tree to grow up to the sky. The son then reached the sky, where he found various things which he obtained for the future use of mankind. Finally the Spider let the young man down in a basket. He found his wives, and took revenge on his father. Other stories deal with Coyote's attempts to overcome animals and monsters. Although many of these end with the defeat of Coyote, in others he succeeds in ridding the country of the monsters which infested it.

Many other traditions deal with his visit to the sun, with the origin of fire, which is believed to have been obtained by the Beaver and the Eagle, and with the origin of certain peculiarities of animals. Several of this last class of stories deal entirely with animals, while most of the other legends of the tribe relate to adventures of men who meet with supernatural beings or with animals.

Cold winds are caused by the people who live far to the north, where earth and sky meet. Hot winds are made by another people, who live far south. Wars between these people, which exposed the earth to alternate spells of hot and cold winds, were ended by an intermarriage between them.

The thunder is believed to be a bird a little larger than a grouse. It shoots arrows, using its wings as a bow. Giants, dwarfs and other beings of mysterious power are believed in, and high mountains are considered with particular awe. Great mysterious power is believed to reside in the dawn of day, which is frequently prayed to.

The only communal festival of importance seems to have been a feast connected with dancing and praying, which lasted a whole day, and was repeated more or less regularly. The dancing ground was generally carefully prepared, and it would seem that the dance had some reference to a belief in the return of the souls. This appears more clearly among the tribes in the eastern part of the plateau, while the tribes in the region near the coast range either had lost the knowledge of the earlier significance of the dances, or have never had any definite idea in relation to the return of the dead connected with the ceremony. A characteristic feature of the dance in the western region was the custom of according to the young men and the young women the right of touching one another, thus symbolizing their desire to be married. The act of touching was considered a formal marriage.

The general consideration of the culture of this district suggests that in former times the culture was even more simple than it is now. A greater complexity has developed, partly owing to the influence of the coast tribes, and partly owing to dissemination of cultural elements belonging to the Plains Indians. The influence of these two areas is indicated, not only by the complex character of the mythology of the region, but also by many other traits.

Many of the coyote tales are almost identical with those told by the Plains Indians from the upper Mackenzie as far south as the lower Mississippi River, while the other transformer myths of the Salish tribes are analogous to the traditions of the coast Indians. Other indications of affiliation to eastern North America are the elaborate feather technique, the highly developed pictographic painting, and the peculiar angular decorative elements which are found particularly

in the decorative designs executed on hide. The influence of the coast Indians upon technique does not extend far to the east. It makes itself felt in the wood-work, particularly in the dug-outs of the western tribes, and in the high development of the fishing industry. Their influence upon the art of the people seems to have been very slight.

The most important trait in regard to which the culture of the plateaus differs from that farther to the east and from that of the coast is the great simplicity of social and religious life. There is practically no indication of the complex ritualistic symbolism of the Plains Indians, nor of the strict organization of the ritualistic brotherhoods and societies of the coast. The more complex forms that occur on the plateaus are clearly due to foreign influence. Thus the most highly developed forms of religious dance seem to have been found in the eastern plateau regions, while the influence of the social organization of the coast has made itself felt among the most western tribes of this area. Thus, the Lillooet, a Salish tribe in direct communication with the coast tribes, have gentes similar to those of the coast tribes; and analogous developments, even in a more marked degree, are found among the Athapascan tribes that are in contact with the Tsimshian Indians of Northern British Columbia.

It would seem that in the early history of this district the coast of Southern British Columbia partook of all the essential traits that are now characteristic of the plateaus; and both linguistic and archæological indications suggest that the Salish tribes which now inhabit the coast of the Gulf of Georgia separated from the Salish tribes of the interior at a time when both had the simple form of culture that seems to be characteristic of the whole plateau area and of the Mackenzie basin.\*

## 10. THE SALISH TRIBES OF THE COAST AND LOWER FRASER DELTA.

BY CHAS. HILL-TOUT.

In attempting in this necessarily brief paper to describe the lives and conditions of the westernmost of the Salish tribes of British Columbia I can only touch upon the more striking features of my subject, and this I propose to do under the threefold division of Social Organization and Customs; Religious Beliefs and Practices, and Material Culture.

\*James Teit. The Thompson Indians of British Columbia. Publications as the Jesup North Pacific Expedition. Vol. I., pp. 163-390. Leiden, 1900.

Livingston Farrand. Basketry Designs of the Salish Indians. Ibid., pp. 391-399. Leiden, 1900.

James Teit. The Lillooet Indians, Ibid. Vol. II., pp. 193-300. Lieden, 1906.

James Teit. Traditions of the Thompson River Indians. Memoirs of the American Folk-Lore Society. Vol. VI. Boston, 1898.

## SOCIAL ORGANIZATION AND CUSTOMS.

The social organization of the littoral Salish is found to differ materially from that of their congeners of the interior. The difference begins with the Lower Lillooet tribes and continues as we proceed down the Fraser until when we reach the Vancouver Island tribes, a condition of things is found to prevail as unlike that which characterizes the inland tribes as if no relationship existed or ever had existed between the two divisions.

From a social structure which in its simplicity and looseness borders closely upon pure anarchy we reach a comparatively complex social organization under which the commune is divided into a number of hard and fast classes or castes which exhibit at times a rigidity and inflexibility that in some features recall the social divisions of the natives of India.

Among the Lkúngen and neighbouring tribes there are three of these castes not counting that of the Slaves. First, there is what may be called the "royal" or "princely" caste composed of the ruling chiefs of the local communes and their families. These form a class apart from the rest of the people as inaccessible and exclusive as any of the Royal Houses of more sophisticated peoples. The chieftaincy which is elective among the interior tribes is here strictly hereditary, passing from fathers to sons in the same families as automatically as clock-work. This class is known under the distinctive name or title of *teílángen-siám*.

Next to this came the *sílee-siám* or caste of the hereditary nobility—men with family histories, as proud of their lineage and honourable descent as any Spanish or Castilian grandee.

Below these came the *kwutlgélingus* or common-folk, "people without grandfathers;" and beneath these again the slave class.

Between each of these classes or castes there was an absolutely impassable barrier as far as the Island Salish were concerned. Among the Delta tribes class exclusion was not apparently so rigid and inflexible as on the island; nor was the chieftaincy regarded, in theory at least, as hereditary, though practice was fast making it so here also, when we first came into contact with them.

The rigidity of the island classes and the jealous exclusiveness of the hereditary nobility is clearly brought out in a most interesting and significant manner, viz., by the upgrowth and existence among them of an intermediate class, a kind of *bourgeoisie*, called in the Lkúngen tongue *nítcnángit*, which name has exactly the same significance among these people as the term *parvenu* had under the old French regime. The *nítcnángit* were men who, by their ability or good luck, had acquired wealth, by means of which they had gained a certain social standing, but as they had no "grandfathers" no pedigrees of honourable descent, and no family or kin-crests, they could not be admitted among the hereditary nobles and so had to form a class intermediate between these and the common-folk.

The family pride and exclusiveness of the privileged classes was further illustrated in every social function which they held, and of these there were a goodly number, such as naming-feasts, marriage-feasts, mortuary-feasts, and the "potlatch," or gift-feasts. On



these occasions the chiefs put on lofty and condescending airs, conversed only with one another, and formed a group apart by themselves. The hereditary nobles, or men of pedigree, formed a second group, and the untitled or common-folk a third. The *nitcnángit*, or *nouveaux riches* held on these occasions a very equivocal position determined largely by the condescension of the nobles and the degree of respect accorded them by the people.

The Lkúngen method of receiving and placing their guests was absurdly like that in vogue in high social functions in Old World Society. Two or more of the older noblemen stood at the entrance of the Feast Chambers and received the visitors, enquiring their names or titles and those of their fathers and grandfathers and placing them accordingly—rank being determined and marked by these as distinctly as among ourselves. Each social division or caste had its own list of names or titles so that a person had but to give his name or that of his father or grandfather to show his social position and standing in his tribe.

The name systems of the Salish, like those of other primitive peoples, are very interesting, and their study reveals some of the most curious phases of savage culture. The limits of this paper preclude a full consideration of these here, but a few remarks upon the name-feasts of the Coast Salish—a function which had an important place in their social life—may be offered.

These naming-feasts refer only, of course, to the customs of the upper classes, the chiefs and nobles, the common people could not afford such.

Titular names were bestowed upon their bearers only when they had reached and passed the age of puberty. To show the way in which this was generally done let us suppose a nobleman of standing has a son fifteen or sixteen years of age, on whom he desires to bestow one of the family names or titles. He first goes to the chief of his commune, informs him of his desire and secures his acquiescence and promise of assistance. A date is then fixed for the event and invitations are sent broadcast throughout the neighbouring tribes. On the day appointed for the ceremony great numbers of guests come in from the friendly villages round about, some also coming from distant settlements if the giver of the feast is well known and of distinguished rank. Preparations have been going on for days past to receive and entertain these visitors. Large quantities of food have been brought together by the host and his kinsfolk; the family treasure-chests have been opened and their contents set in order for distribution at the feast. When all is ready the father of the boy who is to receive the name, the boy himself, and his immediate sponsors, friends and kinsfolk all ascend the roof of their house—the pitch of the roofs always being low and convenient for the purpose—and from this vantage ground the proceedings take place. These vary a little from tribe to tribe and from district to district. Commonly the ceremony is opened by the father of the boy dancing one of his family dances—to dance meaning also to sing at the same time. This song dance is probably a more or less dramatic representation of some event, fancied or real, in the life or history of his ancestors, perhaps that which gave rise to the name he is going to bestow upon his son. When this is over a distribution of blankets—the measure of wealth of the coast tribes—is made to honour the names and spirits of his

family, it being held dishonorable to speak of or even mention an ancestral name publicly without making gifts. The father now calls about him some thirty or forty of the leading noblemen among his guests to act as sponsors or witnesses of the rank his son will acquire by the name he is about to receive. Two eldersmen, or preferably two aged chiefs, who know his lineage and ancestry, now bring the youth forward and standing one on either side of him the elder of the two proclaims in a loud voice to the assembled audience that it is the wish and intention of the father of the youth to bestow upon him his paternal grandfather's name or title. At this the people express their assent and pleasure by clapping of hands and shouting.

The name is then given to the youth after which another distribution of blankets takes place, special care being taken to give at least one each to all the formal witnesses of the ceremony and to the officiating elders. If the father is wealthy he will throw other blankets among the common-folk to be scrambled for. When this part of the ceremony is over the feasting begins.

After the naming ceremony is over the youth is known by his newly-acquired name though, according to their customs, he is never called by it except on special and ceremonial occasions.

Among the Lkúngen and cognate tribes a man could not take his own father's name should his father die before he had received his titular name, the names of deceased persons being tabooed among them for a whole generation. Hence in the case just imagined the youth received and revived the name of his father's father. The ancestral names were thus handed down in these tribes.

The marriage customs among these tribes bring out in the same way the exclusiveness of the upper classes. Marriage in their rank was an exceedingly formal affair and hedged about with many precautions to prevent *mésalliance* and sullyng of their blood. When a youth had arrived at a marriageable age his family cast about for a suitable bride for him. It goes without saying that she must be his equal in rank. Having selected a girl the father sends two or more old women of his family to sound the girl's parents and ascertain their willingness to the union. If they receive the offer in a friendly spirit he next sends two eldersmen of his kin-group or crest whose office it is to set forth to the girl's family the rank, honors and standing of their young kinsman. Should these be satisfactory to the girl's people both parties then make preparation for the marriage.

We gather from all this how important these tribes regarded the marriage unions and how jealously they guarded their rank. There are many other interesting social features in the lives of the tribes under consideration which I have not touched upon at all; but to speak of them here would be to extend my paper beyond the limits accorded me. Those interested in a further study of the social organization of these tribes may consult the writer's ethnological reports on this division of the Salish in which all these features are dealt with in detail, each tribe being treated separately.

#### RELIGIOUS BELIEFS AND PRACTICES.

Closely connected with one side of the social life of these tribes was one of the most characteristic features of their religion. I refer to their totem or kin-group crests. Among the Delta and Coast



tribes a marked social phase of totemism has been developed, of a character such as is generally found among other totemic peoples. Although the kin-groups are not commonly called by animal or plant names, as most of them are among the Haida and Tlingit, they were nevertheless distinguished one from another by crests in the same way as the kin-groups of the northern tribes, each family of standing possessing its own crest or crests. These are more or less conventionalized representations, plastic or pictographic, of the ancestral totems of the family or kin-group, commonly thought to have come down from the founder of the family or group. These totems are looked upon as spirit guardians of the household, representations or symbols of them being carved or painted on some portion of the family dwelling, usually upon the supporting pillars of the roof, and among the Island tribes they largely take the place of the individual totems or guardian spirits of the Interior Salish—the personal totem among these tribes having given place almost entirely under their changed social conditions to the family or kin-group totem.

Belief in protecting spirits constitutes the chief feature of the religion of the Salish. Such beliefs were not confined to this stock; they were held in one form or another by practically all the aboriginal tribes of the New World when we first came in contact with them. It has its source, of course, in those animistic, anthropomorphic conceptions common to primitive man the world over. The Salish in common with other tribes in the same plane of culture as themselves, peopled their environment with mysterious beings and sentient agencies of beneficent and maleficent character, mostly of the latter. The land, water and air teem with mysteries; they are surrounded on all sides with capricious beings that have power to harm or destroy them. They are at any moment of their lives liable to come under the influence of these—to be made their victims or prey; consequently they felt a vital need of some protecting, guiding influence in their lives; and hence arose their practice of seeking and acquiring tutelar spirits.

The general method of acquiring these guardian spirits was by means of dreams and visions. These were not the ordinary dream or vision but others of a mystic order, which came to the novice or person seeking the spirits, only after long and special preparation. The seeker goes apart by himself into the forest or mountains in some solitary spot close to a lake or some other body of water, and imposes upon himself a rigorous course of training, which is called *kwakwai-yisit* by the Delta and some of the Island tribes and by other names in other divisions. This training consists of prolonged fasts, frequent bathings, forced vomitings and other exhausting bodily exercises. With the body thus enervated the mind becomes abnormally active and expectant and dreams and visions and hallucinations are as natural to the novice in such a state as breathing; and we can readily understand how real must seem to him the visions of his looked-for spirit helper.

Whatever object appears to him on these occasions, or rather what he conceives to be the spirit of the object, becomes his totem or tutelary spirit. It may be anything almost in nature—plant, bird, beast, fish, a tool, weapon or any other inanimate object, or natural phenomena. As, under the view he takes, everything in nature is possessed of a spirit and has mystery power, the spirit of a stick or



stone can protect and lend him aid as well as the spirit of living things. Usually, however, he recognizes some kind of hierarchical order among these ghostly helpers. Some things or objects were more "powerful" to aid than others, and some aided along special lines in one direction and others in another. Some conferred great hunting powers others great running or fighting powers. Others again assisted the "medicine" men in their cures. If therefore the seeker after mystery powers was not satisfied with the first "spirit" that came to him, or rather with the powers it bestowed, he would enter upon a second course of training and await the coming or vision of a second helper, or even of a third or a fourth, spending years perhaps in his seeking.

Between the individual and his protecting spirit or spirits a very close and mysterious relationship is supposed to exist. He does not pray to his totem in the sense in which we used this word, but expects and looks for its aid and protection when needed. The totem is supposed to warn him by dreams and visions of impending danger and to assist him in difficult undertakings, and indeed in all the issues of his life.

Outside of this belief in tutelary spirits there was no conception among the Delta or Coast Salish of a Supreme overruling Being who ordered and regulated the universe. It is true they did in a kind of way look to a being who was thought to have taught their first ancestors such knowledge as they possessed, and who by his magic, wonder-working powers procured for them their fish and game and roots; but this being was a very mythical creature, having none of the attributes of a god about him; their stories concerning him and his life and doings when he was among them show him to have been half human, half bestial. Indeed, all the beings that peopled their world in its infancy were of this nature, possessing the same dual characters and assuming at will that of man or beast. Many of the Indians believe themselves to be descended from these mythical creatures and claim in consequence power over the *animal* descendents of them to-day whom they look upon as related to themselves. Thus the people of the Mountain-goat or Sturgeon ancestry believe they can secure animals of these species more readily than other people can, because of the supposed relationship existing between them; and they had esoteric formulas and ceremonies which they employed when they wished to capture them and which were thought to cause the fish or animals to yield themselves readily to their human kinsmen.

In these religious ideas of the Salish there is nothing that might be regarded as of an ethical or moral character. Yet it must not be supposed they were without morality or rules of conduct. Before contact with ourselves no people could be more moral and decent in their lives and actions. But their morality was of a social, practical kind, having no religious sanction whatever. Customary law and public opinion are the source and guides of conduct among primitive people like the Salish, as indeed they are to a larger extent, than would perhaps be generally admitted among ourselves. No religious or moral obligation could be more binding or more effective in regulating sexual and other social relations than that imposed upon the Salish by their customary laws and the public opinion of the commune, and though none of these laws were conceived as god-

given they were none the less binding upon them on that account. Custom founded upon the wisdom and experience of their forefathers had established certain lines of conduct, and the sense of the community as expressed by public opinion, saw that these were observed. For example, chastity in both sexes, but, of course, particularly in that of the female, had been found to be conducive to good order and social well-being, and was demanded; and a lapse from virtue in either sex, married or unmarried, was regarded as a deep shame and lasting disgrace to the persons involved and all their kindred. So keenly was social disgrace of this kind felt among the Salish that it not infrequently led to self-destruction, particularly among girls. We have many of their folk-tales in which incidents of this kind occur. It is indeed in their traditional lore that we get our best insight into the character and lives of those tribes before the disrupting, unbalancing influences of our civilization made themselves felt among them. The view we gather of their lives and conduct from these sources makes one, indeed, almost wonder whether the restraints upon conduct imposed by the authority of religion are any stronger or more effective in a community than those having their sanction in public opinion only; and certainly those who look with dread at what they think is the subversion of the authority upon which our moral or religious laws and restraints are grounded, and expect nothing but social anarchy, disorder, shameless immorality and all other imaginable evils to shortly come upon us, may take heart from the picture which the Salish folk-tales reveal to us of the life and condition of these pagans before we attempted to impose upon them our superior Christian civilization, the blessings of which they very ungratefully do not properly appreciate.

In common with other primitive peoples the Salish had an unquestioning belief in the imperishability of the soul or spirit—of a life hereafter; but their views of this after-existence are like some of our own, not always clear or well-defined.

They also believed fervently in ghosts, particularly those of recently-deceased persons. They believed also that some of their wise men or shamans could restore the soul to the body and bring the seeming dead to life. Many forms of sickness, fainting spells and swoonings in particular, they attributed to the straying away or withdrawing by magic means, of the soul or spirit from the body; and certain of the shamans were held to be skilled in going after and bringing back these missing spirits, and hence the power and influence of these men in the community.

These shamans or "medicine" men believed in their own powers just as sincerely as their more sophisticated brothers do in theirs, and thought their sometime cures were effected by the might and magic of their protectors. So did the patients; for according to the measure of their faith in the power of the medicine man, so was their cure in all cases where the mind was able to influence the body. Nowhere are there such wonderful "faith-cures" as among primitive races, only they are not here called by such names nor recognized as such. The medicine-man gets all the credit and all the glory; but then as a set-off to this he was held responsible for all failures to cure, and if his patient died under his hands he had to pay to the relatives of the deceased person a heavy death fine, so things were after all pretty fairly balanced between doctor and patient among them.

The more one studies the old-time Salish the more one is constrained to admire the wisdom displayed in the ordinances which regulated their lives and actions. They appear to have been an eminently practical people, and to have found satisfactory solutions to many of the problems of existence more advanced races are still much exercised in mind upon.

### MATERIAL CULTURE.

Under this division we will discuss as far as our space permits the habitations, food and dress of the Delta and Coast Salish.

#### *Habitations.*

The main or permanent dwellings of these tribes differed radically from those of their brothers of the Interior. In nothing does the difference in the physical surroundings of the two divisions manifest itself more clearly than in their habitations.

The typical coast structure was the communal long-house; and some of these dwellings were truly and literally *long* houses, stretching under one roof in unbroken continuity for six, seven, eight and even nine and ten hundred feet. Houses of from four to six hundred feet were quite ordinary structures. Simon Fraser records seeing one in his trip down the river which afterwards bore his name, that extended for upwards of six hundred feet and had a width of sixty feet.

These houses were generally of the half-gable, single-slope style; and as their fronts or face-walls were only a few feet higher than their back walls, their common great width made the roofs very shallow indeed in their pitch. But such disadvantage as this might entail upon them by occasional leaks was more than compensated for by their use as platforms, for which purpose, as I have already indicated, they were customarily used on all festive and ceremonial occasions.

The frame work of these houses consisted of two rows of massive pillars which ran from end to end of the structure on either side, each pair of pillars being from fifty to sixty feet apart in a typical dwelling. On these pillars long stout beams rested in notches cut for the purpose, and upon these again the supporting poles of the roof which was formed of thick cedar slabs laid one upon another after the manner of tiles. Upon one of the faces of the main pillars figures in high relief were customarily carved. These represented the family or kin-group totems,—the presiding, protecting spirits of the household.

The walls of these structures were always built separately from the main frame work, which was intended to support the roof only, and were made of cedar planks or slabs, the same as those forming the roof laid horizontally between sets or rows of double sticks, between which they were fastened by cedar withes. The planks were built up from the ground, the lower edge of each being made to overlap the one beneath it for an inch or two to keep out the wind and rain. There were no windows or chimneys in these dwellings, temporary smoke holes being made in the roof by pulling down or thrusting aside a plank or two. Light had access in the same way. Within the structure low, broad platforms were built all round the walls. These formed the lounges or resting places of the inmates by day and



their couches or sleeping places by night. Their beds consisted of several layers of long reed mats, one end of which was rolled up to form a pillow or head rest. Blankets woven from a mixture of dog and mountain-goat hair and bird's feathers and skins of their larger game animals formed their bed clothes.

Beneath these bed platforms some of the tribes stored away their winter supply of roots, others their fire wood. Overhead suspended from the rafters were hanging-shelves, on which they placed away their store of dried fish, meat and fruit.

The inner walls of these dwellings were lined during cold weather with swamp grass mats, and hangings of the same material divided the interior of the building into a number of separate compartments or sections, each of which corresponded to the space between the main pillars, making an area usually of about fifty or sixty feet. The compartments of the chiefs were sometimes half as long again as the others. These were usually situated in or about the middle of the building. Next on either side came the compartments of the nobles, the common folk occupying the sections nearest the ends of the house.

The position of the doors varied somewhat with the locality. Sometimes these were placed in the ends near the lower or back wall, sometimes at intervals where the dwelling was a long one, in the front wall, at others in both front and back walls, a boarded passage-way running right through the building.

During the great dance season or *Smēltás*, which lasts from one to two moons, corresponding to portions of our months of December and January, the hanging mats which divided the interior of the dwellings, were taken down and the whole space thrown into one large, common hall. It was because of these annual social events that the partitions were of the temporary character described. For among the upper Delta tribes who did not observe the *Smēltás* or winter dancing season, the partitions were always of a permanent kind. Here they were made of boards which divided the long-house into a number of double compartments, each of which was subdivided again into two separate ones by the passage way I spoke of just now as existing in some buildings, entrance to the living room being made from the centre of these. Usually each compartment was shared which were closely related to one another and between whom no marriage or sexual intercourse was allowable.

The household utensils consisted usually of an assortment of basketware, wooden, trough-like dishes of various sizes, wooden and horn and shell spoons, reed serving mats and plaques of basketry, cooking-stones, tongs for handling them, and the family treasure-chests. A well-to-do family would have several of these latter and the wealthier chiefs would own perhaps a score or more. These chests were most ingeniously made from three pieces of cedar, the cover bottom and sides being each formed of one piece. They are rectangular in shape, the board forming the sides being so cut on its inner face at three of the angles, as to enable it to fold without cracking or breaking, the fourth angle being formed by the juncture of the two ends which are evenly mitred and sewn together from the inside. The bottom is a shallow tray fastened by stitching to the inside of

the box, and fitting so evenly that the box will hold water without leaking. The top is a similar tray which overlaps the edges of the sides. In these receptacles are stored away the family treasures which consist mainly of blankets and their ceremonial costumes and ornaments.

### *Food.*

The food of the Delta and Coastal Salish consisted mainly of fish, in which the salmon figured largely, this fish taking much the same place among these tribes, particularly those of the Delta, as rice does among the orientals or bread among ourselves. It was the staple of their larders and was eaten in one form or another the whole year round. The Island Salish, and those of the mainland who had settlements actually on the coast waters, made use of many other fish and marine products as well, such as the seal, porpoise, sea-lion and whale. In addition to their fish diet they eat the flesh of most of the animals and birds of their habitat, of which deer and mountain-goat, ducks and geese were the most important. They also gathered and ate many kinds of wild berries and bulbous roots, particularly those of the lily kind of which they had several varieties. These latter they cooked by steaming or baking in ovens made in the ground. The fruit they eat either in its fresh, raw state or dried like the currants of commerce, or made into compressed cakes or into thin sheets of sun-dried "jam."

They cooked their food by baking, roasting or boiling. The baking was done in ovens or holes made in the ground heated with hot stones or by fires. The roasting was accomplished in different ways, before or over open fires, and the boiling by means of heated stones which were cast into their wooden or woven pots or kettles. The food was commonly served in dishes if of a liquid nature, if solid on mats or plaques.

All the tribes dried large quantities of salmon and stored them away for winter use. They also extracted oil from the salmon, dog-fish, "candle-fish," and several other kinds, but particularly from the salmon. This they also stored away in bottle-like receptacles of various kinds. Some were made from the whole skins of salmon, others from the hollow, bulbous, bottle-shaped stems of a species of kelp or sea-weed, and others again from the sounds or air-bladders of fish, or the larger intestines of animals.

### *Dress.*

The clothing of the Delta and Coastal Salish was commonly of a scantier nature than that of the Interior tribes. In summer the men customarily went naked save for a loin-cloth. Most possessed a blanket of dog and goat hair or a cloak of dressed deer skin, but these were not ordinarily worn, being reserved for cold weather only, or for formal ceremonial occasions. Some of the nobility and all the chiefs possessed deer or elk hide tunics and long heavily-fringed leggings, but these articles of clothing belonged rather to the style of dress of the Interior Salish than to those of the Coast.

The women went more modestly attired, though their persons were not so tastefully nor so scrupulously covered as those of their sisters of the Interior. The ordinary female dress of the wives and

daughters of noblemen was a long shroud-like garment made of tanned doe-skin. This was commonly decorated about the breast with shell work and the side and arm seams were profusely covered with fringes. To this they added at times short leggings like the men's and coarse hats made of the same material as the best water-tight basketry.

Women of the poorer class and Slaves wore skirts of woven cedar bark and sometimes short shoulder coverings or ponchos of the same material, or others made from the untanned skins of small animals such as squirrels and chipmunks.

The upper Delta tribes wore more clothing habitually than the Coast people, and made it in a more careful and tasteful manner, copying in this respect the beautifully made garments of the inland tribes. The materials they employed were the usual dog and goat hair, skins of various kinds and the soft inner bark of the cedar (*Thuja gigantea*). The dogs from which this hair was taken were a special native breed, possessing a fleecy coat of a texture resembling sheep's wool.\*

## 11. THE TRIBES OF THE NORTH PACIFIC COAST.

BY FRANZ BOAS.

The North Pacific coast is inhabited by quite a number of distinct tribes, whose culture, however, is fairly uniform. According to the degree of typical development we may distinguish three groups of tribes: the northern group, embracing the Tlingit, the Haida, and the Tsimshian; the central group embracing the Kwakiutl tribes and the Bella Coola, and the southern group embracing the Coast Salish and the Nootka. Among the last group the characteristic traits of North Pacific coast culture are weakest, while in the first group they are most strongly developed.

Economically, the people of this region are fishermen, who subsist partly on the salmon that ascend the rivers of the coast in great numbers; partly on deep-sea fishery, which is prosecuted on the cod-fish and halibut banks off the coast. At the same time, seals and sea-lions are hunted. Whales that drift ashore are used, and the

\*F. Boas. The Lku'ngen. Report of the 60th meeting of the British Association for the Advancement of Science, 1890, pp. 563-582, and

F. Boas. The Indian Tribes of Lower Fraser River. Ibid. 64th meeting 1894, pp. 453-463.

F. Boas. Indianische Sagen von der Nord-Pacifischen Küste Amerikas. Berlin, 1895, pp. 18-97.

C. Hill-Tout. Notes on the Skqomic. Report of the 70th meeting of the British Association for the Advancement of Science, 1900, pp. 472-495.

C. Hill-Tout. Ethnological Studies of the Mainland Halkome'lem. Ibid., 72nd meeting, pp. 3-18, 48-63.

C. Hill-Tout. Ethnological report on the Stsee'lis and Skau'lits. Journal Anthropological Inst., Vol. XXXIV., 1904, pp. 311-376.

C. Hill-Tout. Report on the Ethnology of the Si'ciatl. Ibid., Vol. XXXIV., 1904, pp. 20-58.



Nootka carry on actual pursuit of the whale. Those tribes that live near the fjords of the mainland are also energetic hunters, and they pursue particularly the mountain-goat, but also the bear and the deer. Vegetable diet is not by any means unimportant. Large quantities of berries are picked in summer and preserved for winter use. The sap of the hemlock and some species of kelp are treated in the same way. The oulachen is sought for eagerly and the principal oulachen rivers are visited by all the neighboring tribes. This fish is caught particularly on account of its oil, which is tried out and kept in large bottles made of the stems of the giant kelp. Fish and clams are dried in a great variety of ways, and are used as a staple food throughout the year.

The industries of the Indians are based to a great extent on the occurrence of the yellow and red cedar. The wood of the red cedar, which is easily split, is worked into planks, which serve for building houses and which are utilized in a great variety of ways by the native wood worker. The bark of the red cedar is also used extensively for making matting, baskets, and certain parts of clothing. Strong ropes are made of twigs of the cedar, while other ropes are made of twisted cedar bark. Blankets are woven of the inner bark of the yellow cedar, which is shredded and softened by careful beating and then woven by a simple method of twining. It may be said that the salmon and cedar are the foundations of northwest coast culture.

Part of the year the Indians live in permanent villages. These villages consist of large wooden houses built of cedar planks and arranged in a row facing the sea. A street is levelled in front of the houses, and the canoes are placed on runways on the beach in front of the village. In olden times the houses of the northern tribes were of moderate size, probably about 30 feet square. An excavation several feet deep was made, which formed the floor of the house. In front and in the rear two pairs of heavy posts were erected, which supported a central beam. Other posts were placed at the corners of the house, and these supported beams parallel to the central beam. Over these three beams the roof was placed, and the sides of the houses were walled in by means of heavy split planks, placed horizontally and either tied between pairs of supporting poles, one inside, one outside or fitted neatly into the posts that formed the corners of the house.

A fire was kept in the centre of the house, and over it an opening was made in the roof, which served as a smoke-hole. In the daytime, people lived on the floor of the house, while the beds were arranged on a platform that ran all around the walls. Provisions were also kept partly on this platform, partly on lofts, which were suspended from the beams and rafters. According to tradition, there were some houses that had more than one platform, and in which the excavation of the floor was quite deep. In some regions the whole house was supported on poles of moderate height.

The building of a house of this type required considerable skill in woodwork. In former times the Indians felled large trees by means of stone chisels, stone axes, and fires, but the planks used for house-building were usually split off from a live tree by cutting deep notches into the trunk at appropriate distances and then splitting off pieces from the tree by means of large wedges, which, in the north-

ern part of the coast, were driven with long handled stone mauls, while in the southern part of the coast, hand-hammers were used. After the planks had been split off, they were smoothed by means of stone or bone adzes. For very fine work, the process of smoothing was continued until the surface of the plank had reached a high degree of finish. The planks and boards were finally polished off with grit stones and dogfish skin. The art of making household utensils from thin planks of this kind had reached a high degree of perfection. The method pursued was that of kerfing the planks and of bending, after having subjected the wood to a steam bath. In this manner the sides of boxes and buckets were made. These were fastened to a wooden bottom, either by means of pegs or by sewing with twisted cedar twigs. The joints were caulked, and in this manner water-tight boxes were secured. These were used not only for storing provisions, blankets, etc., but also for cooking food, the box being filled with water, which was then heated by means of red-hot stones.

Other household utensils were made of large blocks of wood, which were hollowed out by means of chisel and ax, and which were finished with the carving knife, which had a crooked blade and a handle, well fitting the hand. One of the best products of the woodwork of the natives of this region is the dug-out canoe, which is made of cedar, hollowed out and worked down to an even thickness. After the cedar has been hollowed out, it is steamed and then spread and thus large canoes are made of graceful form and capable of withstanding a heavy sea.

As compared to the woodwork, the basketry of the tribes is very simple. The bulk of the basketry of the more southern tribes consists of woven or twilled matting, made of wide strips of cedar bark, while in the northern regions twined spruceroot basketry prevails. Among the Tlingit, spruceroot basketry takes to a great extent the place of the small boxes which are common on the southern part of the coast. Baskets are largely used for storage of provisions, for keeping blankets, as covers of boxes, for holding spoons, and for berrying.

For fishing, hooks, harpoons, and fish traps are used. A great variety of forms of fish traps are found, in which large quantities of salmon are secured during the summer months. Traps are also used for securing land game. Small fur-bearing animals, as well as larger game, such as bears and deer, are trapped in this manner.

The bow is of simple construction. It is made of a single piece of yew wood, with slightly curved back, flat belly and narrow, round grip. It is carried in a wooden quiver. Arrows with detachable head are used for hunting sea-otter, while land game was hunted with arrows with bone points.

It would seem that in olden times, practically all along this coast, the art of stone chipping was not in use while rubbed slate points and pecked and battered stone hammers and stone mortars were common.

While the men procure all the animal food, except shellfish, the women gather berries and dig roots and shellfish. In some regions of the coast, clover is treated with particular care; although it is not actually planted, clover patches are cleared and surrounded by



fences to indicate the limit of garden patches. On Queen Charlotte Island tobacco was raised in olden times in gardens cleared near the villages.

Household utensils, canoes, and practically all objects utilized by the natives are elaborately decorated. This is true particularly of their woodwork. The style of decoration is very characteristic. It consists entirely of the application of animal motives, each design generally consisting of a combination of various parts of an animal's body. The animal forms, although highly conventionalized, are easily recognized. The style of conventionalization consists in an extended use of curved lines and a tendency to arrange, wherever possible, oval fields, which may be decorated with a group of concentric or almost concentric elliptical or rounded designs. These peculiar designs resemble eyes, and the north-west coast art may be said to be characterized by the prevalence of the eye motive. The eye is used with great frequency to indicate the joints of the body, the original idea being evidently a representation of the ball-and-socket joint, the curved outline of the figure representing the socket, the inner field the ball. In general the artist endeavors to represent the whole animal on the decorative field. In doing so, he is at liberty to distort and dissect the animal figure, so as to fit the whole as nearly as possible into the decorative field. Very frequently this is accomplished by splitting the animal in two and by representing the two halves as spread out; but many other processes are used. These designs are done both in carving and painting. The colors applied are principally black and red, although green and blue also occur. The animals used for ornamentation are almost throughout those which play an important part in the mythology and in the beliefs connected with the social organization of the tribe. It is remarkable that geometrical designs are practically absent. In the southern regions, where the decoration of basketry is almost absent, geometrical designs are also absent. The only region where a highly developed geometrical decorative art accompanies the more realistic art before described, is found in southern Alaska, where elaborate decoration of spruce-root basketry occurs. It seems, however, probable that this art has been introduced through contact of the coast tribes with the tribes of the interior. The decoration resembles the porcupine quill designs of Athapaskan tribes, and is executed in basketry by a peculiar method of "false embroidery." In the most southern part of the region in discussion, geometrical basketry designs are also found, particularly among the southern tribes of the Nootka. These are clearly related to the geometrical designs of the basketry of the coast of Washington.

The social organization of the North West coast tribes is very complex and remarkable differences are found among various tribes. Of the northern tribes, the Tlingit and Haida are divided into two exogamic halves, some of which bear the names of animals, and in which descent is in the female line. The two groups among the Tlingit are characterized by the Raven and Wolf, among the Haida, Eagle and Raven. The members of each of these groups have the privilege of using designs representing certain animals as their crests, and in many cases they claim a supernatural relationship to these animals. To a limited extent, the animals may therefore be



said to be the totems of these groups. It is, however, important to know that not always the principal crest animal and the animal from which the group takes its name are the same. Thus, the Raven clan of the Haida has as its principal crest the killerwhale, and in the Eagle clan of the Haida, the beaver is as important a crest as the eagle. Furthermore, not all the members of each group have the same crest, but there are a considerable number of sub-groups, each of which has a number of crest animals of its own. In a great many cases the acquisition of these crest animals can be traced by historical traditions, and we know that in some cases, crests have been obtained by gift from friends among foreign tribes. Often its acquisition is explained by a myth which belongs only to one of the subdivisions of the larger groups. It is therefore evident that in this case the animal name of the group and the crest of the subdivision of the group are not equivalent.

The sub-groups among the Haida and Tlingit are throughout local in character. They were evidently, at one time, village communities consisting of blood relatives, that is to say, of a number of people related by maternal descent. This group of people had their own local traditions, which in almost every case has the form of a crest tradition.

Although the village was the property of a subdivision of one group, necessarily a considerable number of individuals of the opposite group must have lived in the same village as husbands or wives, as the case may have been. It is probable that in this way the present conditions originated, the recent villages consisting of a number of sub-divisions inhabited by different branches of the two groups.

The social organization of the Tsimshian is not unlike that of the Haida and Tlingit, the only difference being that in this case four exogamic groups are found. Of these, two are named from animals, the wolf and the eagle, while the two others, which have the Raven and the Bear for their crest or totem, have names that are not derived from the names of these animals. Conditions among the Tsimshian are somewhat more complex than among the Tlingit on account of the existence of the greater number of groups. It seems, however, fairly evident that the same kind of local subdivision of the four clans exists which is found among the more northern tribes.

A very curious social organization is found among the Kwakiutl tribes. Among the Tsimshian there is a definite maternal organization, but the tendency toward maternal organization decreases as we proceed from the north to the south. The northern Kwakiutl tribes have a number of exogamic groups which take their names from animals, such as the raven, wolf and killerwhale, and descent is preferably reckoned in the maternal line, but not with such rigidity as is found among the more northern tribes. In certain cases children are free to be counted as members of the father's group. Among the Kwakiutl proper this freedom is even greater. A child belongs by blood to both his father's and his mother's family. By a peculiar arrangement, however, descent is so regulated that it proceeds in the maternal line. It is probable that the clan privileges of the northern tribes are responsible for this curious state of affairs. One of the essential property rights of each individual is his clan-legend and the use of his crest. According to the Kwakiutl custom,

the property right in these objects is held by the men of the tribe. It is, however, not transmitted as a permanent inheritance to the sons, but it is always acquired in marriage. Thus, if a certain man has the right to use the raven as his crest, he will give this crest to his son-in-law about the time when a child is born to the young man. In this way, the son-in-law practically holds the crest in trust for his wife's daughter, because when he in turn is to give up the use of the crest he must deliver it to his daughter's husband, who again holds it in trust for his future daughter. It is clear that in this manner a purely maternal descent is secured. Among the Kwakiutl tribes which follow these customs there is no limited number of exogamic groups as are found among the more northern tribes. Instead we find in each village a considerable number of families represented in the same way as are found in northern villages. It seems probable that here also the different families in each village were originally separate village communities, which, owing to historical fates, came to live in the same village, or which in other places split up and are now represented in different villages.

According to the group system of the northern tribes, each family of the village community must be necessarily exogamic. The custom among the Kwakiutl is not definitely settled, some of the families preferring marriages outside the group, while others prefer marriages in the group. On the whole, marriages outside of the group are more frequent on account of the eagerness of individuals to secure the privilege of using new and important crests.

The further south we go the less important becomes the crest, which among the Coast Salish and Nootka exists only in traces, as compared to its extended use in the north.

The Bella Coola of the central part of British Columbia, who are neighbors of the northern Kwakiutl tribes, and under whose influence their culture has developed, have also adopted the crest system. The village community is here also the social unit, and each village has its own crest. Here, however, the jealousy with which the property rights in the crests are guarded is so great that at least among chiefs' families exogamy is strictly forbidden.

This diversity of types of social organization on the Pacific coast is remarkable. There seems to be very little doubt that the group system of the Tlingit and Haida has exerted a very strong influence over their immediate neighbors. Thus we find that not only the northern Kwakiutl tribes have adopted the group system, but we find the same among the Athapaskan tribes adjoining the Tlingit, and also among those adjoining the Tsimshian. Since the two-fold division of a whole tribe into exogamic group is a phenomenon of very wide occurrence, it is fruitless to speculate on its origin in this special case, but it is worth while to point out that Dr. Swanton in his investigations on the Haida was led to the conclusion that possibly the Eagle group may represent a foreign element in the tribe. However this may be, it is fairly clear that the crest system, which has developed on the north Pacific coast is not necessarily connected with this peculiar division of the tribe.

It may be pointed out that the crest system has an intimate relation to the artistic development among the coast tribes as well as to their mythological ideas, and that the religious importance of the

crest is in most cases very slight among the northern tribes. The Raven, which appears as a group name, is identified with the mythological raven, which will be discussed later. The killerwhale, which also appears as a crest, plays an important part in the religious beliefs of the tribe. On the other hand, the eagle, beaver, and grisly bear, which are important crests common to a great many families have no particular religious significance.

In later times, the idea of the occurrence of crests has exerted a powerful influence over the development of the semi-realistic art of the northwest coast. Almost all the subjects of artistic representation are selected from among the crests, and it would seem plausible that if the crest idea had not existed, the exuberance of artistic form would also not have developed. It is, however, worth while to bear in mind the question whether the artistic skill may not have added materially to the development of the crest idea. The simple fact that a person used to a great extent objects decorated with representations of a certain animal, may have fostered the tendency of using such an animal as a crest. That this has occurred is indicated by historical and semi-historical traditions, which state that a certain design, or object bearing a certain design was given to a person either by a friend or by a supernatural being, and that henceforth the object became his crest. These traditions may be compared to the reports of the origin of decorative designs so common in North America, in which it is stated that the design was received in a dream. Considering the weakness of the religious side of the crest, it seems to be very plausible that the art of the people has, to say the least, materially increased the total number of crests.

That an accretion of new crests has occurred, may be observed clearly among the southern tribes, which evidently had no crests in earlier times, and where we may observe to a certain extent the introduction of northern crests by intermarriage and imitation. I believe it can be shown by a study of the crest mythology of the Kwakiutl that their myths are quite recent and have developed at the same time with the development of artistic reproduction of these crests.

The religious significance of the crest shows great variations. It was stated before that the raven and killerwhale, both crests of the Haida, are the two most important supernatural beings of their mythology. There are a great many cases among the northern tribes in which the crest was acquired by an ancestor of the family in the same way as Indians of the plains acquire a manitou. It is told how a man went out into the wilderness and in the course of events, met a supernatural being or animal, which henceforth became his protector. The difference between the northwest coast traditions and those of the plains consists in the fact that the animal once acquired was transmitted by the ancestor to his sister's children. There is hardly a single case of traditions in which the family claims direct descent from the crest animal.

Among the southern tribes, the type of tradition is more varied. There are a considerable number of cases in which the myth claims that the ancestor of the family came down from heaven, wearing the dress or mask of the animal, which later on became the crest of the family, so that each person wearing this crest impersonates the



family ancestor. While there are many cases of this kind, there are also a great many others in which the crest is explained to have been acquired by the encounter of an ancestor with an animal or supernatural being, which became his protector. In both these cases, the crest is used in the same manner. On the whole, it may be said that the mythological explanation of the use of the crest is by far more complete among the Kwakiutl than among the northern tribes. Nevertheless, I am strongly of the opinion that these mythological explanations are quite recent. The reason for my conviction is the uniformity in type of all traditions of this kind and the phenomenally great extent of borrowing that the evidence shows. It may be well to give an example of this. A characteristic belief of the Tlingit refers to the land-otters, which were said to take away drowned persons. A number of Alaskan traditions refer to adventures of men who were drowned and who were rescued by the land-otters. This belief is not characteristic of the southern parts of the coast, but it has been worked into a myth among the Kwakiutl, which explains the use of a certain mask among one family. The details of this tradition are identical with the details of an Alaskan tradition, and they must have been recently borrowed.

Wherever the crest is strongly developed, we also find an exuberance of artistic forms, particularly representations of crests on houses and graves. The crest is either painted or carved on the house-front; the beams and the posts of the house are carved so as to represent the crest animal, and large posts, called totem poles, representing a series of crest animals are erected in front of the houses. Grave-boxes, memorial posts and posts marking the graves are carved in the same manner. It seems likely that before the introduction of iron tools, these carvings were of more modest form than later on. According to the reports of the natives, in olden times these carvings were cut out on the face of heavy planks; animal figures being cut out either in relief or in the round.

Society on the north Pacific coast was divided into four classes, chiefs, nobility, common people and slaves. Among the southern tribes there is a marked tendency to count the rank of a person according to the position held by his father, not by his mother—another indication that paternal descent in this region preceded maternal descent.

The system of barter and exchange among the northwest coast Indians is quite highly developed. At the present time the unit of value is the blanket, and values are calculated by blankets. The assumed value of the blanket at the present time is 50 cents. Canoes may be counted as worth so many blankets, and other objects are valued in the same way. In olden times curried elk skin blankets, canoes, and slaves were used as standards of value. In their dealings among themselves, objects are valued according to these valuations and exchanged on this basis, but in many cases actual payment is made by means of blankets.

A vast credit system has grown up among all the tribes of the north Pacific coast. We may observe that originally this system was based on the custom of loaning out property before the assembled tribe as a means of having a public record of the transaction. Consequently, the payment of debts was also made in the same way. This seems to be the fundamental idea of the so-called potlatches. At the present time

the fundamental idea of the potlatch is that of a great festival, at which the host distributes his whole property among his friends. In a small potlatch he will give presents to the members of his own family, in a larger potlatch he will make presents to the other families inhabiting his own village. In this he is assisted by the wealthy members of his own family. In still larger potlatches the presents are given to neighboring tribes that have been invited, and the host is assisted by all the members of his own tribe. In all these cases the presents are given to individuals as members of certain families and tribes. Through a potlatch of this kind high distinction is attained by the host, in accordance to the amount of property given away and the number of tribes invited. In principle, however, this distribution is partly a payment of debts, partly an investment of property, which at a later time will be returned with 100 per cent. interest by the recipients. Since the property has to be returned not to the host individually, but to him as representative of the position he holds in his family and in his tribe, this distribution is at the same time an investment for his successors, or, as might be said, it may become the life insurance for his children. Owing to this system of potlatches and the system of credits it involves, the total amount of property claimed by each individual among these tribes is ever so much greater than the blanket currency and other property in existence among all the tribes combined, and as a result currency blankets often change hands with remarkable rapidity. It may be partly due to the needs of this system that certain symbolic objects have attained fanciful values. This is particularly true of the peculiar copper plates which are used among these tribes, and some of which are valued at fabulous prices. Even now there are copper plates among the Kwakiutl that are valued at 7,000 blankets, although their actual value is nil. They may be compared to a certain extent to bank notes which represent property otherwise invested.

Connected with this complex system of values and of credits is also the occurrence of symbolic property which is given as a dower. This also is most strongly developed among the Kwakiutl. The property consists of bracelets tied together to sticks, each stick representing a certain value. Small imitations of copper plates about one inch in length are used in the same manner. The young woman also receives a large number of old box covers, of a type which has gone out of use entirely, but each of which symbolizes a box and its contents. Thus, hundreds of box-covers and hundreds of small coppers and of sticks of bracelets may be given away, which have only symbolic value, which, however, may be used as coin in exchange for objects of value.

The potlatch is celebrated on every occasion of importance to the family, such as, at the time of initiation of a young man, at the time of promotion in rank, the erection of a house, and at marriage ceremonies. The system has spread, in less pronounced form, to the Eskimo tribes of Alaska, southward as far as the Columbia River, and also to the Salish and Athapaskan tribes bordering on the coast region.

All along the north west coast is found a ritualistic organization which intercrosses the family organization in a most curious manner.

This organization seems to be most marked among the Kwakiutl Indians, and I will describe the conditions found among them.



Besides the crests, which are owned by each individual, he has also the privilege, which is inherited, together with the crests, of being initiated by a supernatural being. The method of initiation is the same as that of the eastern Indian, who finds supernatural power after fasting. The difference between the acquisition of supernatural power among the eastern Indians and that believed in by the Kwakiutl is that among the former the relation between the individual and the supernatural power is purely personal, while among the latter it is a family affair, each family having the right to be initiated by a certain supernatural being. The relation between this idea and the property in crests is also characteristic. They descend in the same manner, but, while the crest is inherited without any particular ritualistic performance giving the individual the right to the crest, the protection of the supernatural being must be acquired in each individual case by an initiation. There is an important difference between the traditions relating to the acquisition of crests and those which relate to the gift of magic powers by a supernatural being. While the ancestor acquired the crest for the whole family, he only acquired the privilege for his descendants to communicate with the same supernatural being.

The supernatural beings who are the protectors of families are, comparatively speaking, few in number, and for this reason a considerable number of families have the same supernatural being as their protector. Notwithstanding this fact, the method of initiation is different for each family, the method being determined by the legend which accounts for the acquisition of the supernatural being as the family protector.

All the individuals in the tribe who have the same supernatural being as their protector are grouped together during the ritualistic performance in one group, which takes the place of the family organization that prevails during the rest of the year. Among all the northwest coast tribes these ritualistic performances are confined to the winter months, and the season is set off from the rest of the year as the sacred season. Since all the families participate in the rituals celebrated during the sacred season, the whole family organization is broken up during this period. The individuals initiated by supernatural beings form one group in the tribe. They are treated with particular regard and take the place of the high nobility. The uninitiated, on the other hand, take the position of the common people. The uninitiated, in turn, are also subdivided into a number of groups, not according to the families to which they belong, but according to their prospective position among the initiated. Thus, young children, who will probably not belong to the initiated for a considerable time to come, form a group by themselves. The young men, older men, and those who in former times belonged to the initiated, and who have given up their membership in favor of their sons-in-law, each form a class by themselves. Thus, we find the whole tribe, instead of being arranged in families, arranged in two large groups, the uninitiated and the initiated. The uninitiated are subdivided into age classes, while the initiated are grouped according to the spirits by which each group is initiated.

The most important among these are the Cannibal spirit, the Ghost, the Grisly Bear, and the Fool Spirit.

All the legends explaining the practices of these sacred societies relate some event telling how a member of the family was carried away by one of these spirits; how he saw the spirit's house, and the ritual,



and how later on he was taken back, and imitated what he had seen. This, which is the characteristic explanation of practically all Indian rituals of North America is, of course, merely a re-statement of the practices that are used at the present time. The reasons assigned for the various practices, the most important among which is ritualistic cannibalism, show material differences, not only among different tribes, but even inside of the same tribe. Thus, the principal myth explaining cannibalism relates to the visit of four brothers to the house of the cannibal spirit, who threatened to devour them. By a stratagem the young men made their escape and reached their father's house pursued by the cannibal. The father then invited the cannibal, pretending that he would make a feast for him. In the course of this visit, the cannibal was thrown into a ditch filled with red-hot stones, where he was burned, and from his ashes arose the mosquitoes. From this time on one of the sons imitated the actions of the cannibal, while another son imitated the actions of the grisly bear, who was the cannibal's watchman.

In another tradition of the Kwakiutl, which accounts for the cannibalism of another family, it is told how a young man, upon leaving his house in the evening, was taken away by the cannibal spirit, who took him to his house, where he saw a dance performed, the singers being seated in a ditch, and the rainbow appearing during the dance in the house. While dancing, the cannibal killed and devoured a slave. Since that time the dance is performed in this manner by the young man's family.

Notwithstanding the difference of these traditions, the men initiated in these different forms by the cannibal spirit belong to the same society during the sacred season. The cannibal is highest in rank in the tribe, and next to him is the ghost dancer.

Among the Kwakiutl the ritual consists in the initiation of the novice, the return of the novice, and the exorcising of the spirit that possesses him. The usual sequence during the ritual is the following: The singers sit in the rear of the house, beating time on a plank with batons; in the left hand rear corner of the house is seated the man who beats the box-drum; in front of the singers, near the fire, which is built in the centre of the house, sit the members of the initiated, those highest in rank in the middle, those of lower rank arranged all along both sides. The uninitiated sit in groups along the sides of the house, those lowest in rank, that is the women and children, near the door.

The ceremonial begins with a number of speeches and songs, and with some of the incidents of the potlatch. During these introductory incidents, the voices of the spirits are heard (represented by whistles, which are blown inside or outside of the house), and suddenly one among the uninitiated disappears. It is stated that he has been taken away by the spirits, and that at a set time he will return. On the day set for his return the whistles of the spirits are heard again, and the people go to search for the novice, who is generally found at some little distance from the houses, in the woods, and he is then brought back by the tribe, who arrange themselves in formal procession. Then follow a series of dances, partly performed by the novice who impersonates the spirit that possesses him. Other dances are performed and songs are sung in order to quiet the spirit. After four formal dances it is supposed that the spirit has left, and the novice has to undergo a ceremonial purification, which lasts for a con-

siderable time, and consists essentially in ceremonial washings, which are repeated at intervals of four days, or multiples of four days.

This whole performance is interrupted by numerous accessory performances, consisting largely in dances of the older members of the initiated. These are often provoked by transgressions of the rules of behavior during the sacred season. Thus, the Cannibal may be excited by failure to observe the rule that nobody is allowed to eat before the cannibal has eaten; or the fool may be excited by mention of a long nose, which is believed to be characteristic of the fool.

The dances themselves, as stated before, are pantomimic presentations of the acts of the spirits. As a rule, the first dance is performed by the novice, who is dressed in certain rings made of hemlock branches, and with characteristic face-painting, these being determined by the tradition of the initiation. In the second dance the novice appears wearing a mask, which represents the spirit which possesses him. In the third dance he appears wearing rings made of cedar bark dyed red, which is a symbol of the sacred ceremonies. The form of these rings also depends upon the tradition explaining the ritual. In the last dance he appears again wearing the mask of the spirit.

The details of these rituals show great varieties in different regions. Thus, among the Nootka, who have adopted large portions of the ceremonial, the essential performance is always the appearance of a great number of men wearing wolf-skins and wolf-masks, who take away the novice and who also return the novice at a later time. Other forms of the ceremonial, which are more like those found among the Kwakiutl, are, however, not absent.

Among the Bella Coola, the traditions relating to the cannibal have quite a distinct form, being closely related to the concepts of the tribe who believe that a number of deities inhabit a house located in the zenith. Among these deities is the cannibal spirit. In this tribe the spirit of cannibalism is shown as a wolf or an eagle, which is bodily taken out of the body of the novice. The whole ceremonial among this tribe is much more dramatic than among the Kwakiutl.

Among the tribes of northern British Columbia a portion of these ceremonials have been introduced quite recently, and the ritual is, on the whole, more closely connected with clan ceremonials than with initiation ceremonials.

Linguistic evidence, as well as other historical data, show that the cannibal ceremonies were originally confined to the more northern Kwakiutl tribes—probably the Bella Bella and the tribe of Rivers Inlet, and that later on they were acquired through intermarriage by the neighboring tribes. It seems probable that many of these customs have originated from old war ceremonials. This is suggested by the fact that the reorganization of the tribe, according to ritualistic groups, took place also in times of war, and that during such times the high grades of the initiated, particularly the Cannibal, Bear and Fool were the warriors. The cannibalistic act seems to have consisted originally in the killing of a slave and, incidentally, in killing a slave by biting his throat, by which act the victory was symbolically repeated before the assembled tribe. Among the more northern tribes, particularly the Tsimshian and Haida, no such development can be traced, and it seems more likely that among them the custom was directly copied from their southern neighbors.

It seems likely that the development of the societies of the initiated and uninitiated has taken place, to a certain extent, under the

stimulus of the family organization with its crests, which pervades the whole life of these tribes. The privileges and duties of the groups that exist during the sacred season are quite analogous to those of the family organization, which exists during the rest of the year.

A similar effect of the social grouping of the tribe may be observed in many other directions. Thus, we find that in the summer season festivals are given, not only by the families, but also by the age classes, which, however, in this case appear as intercrossing subdivisions of the families. Even the shamans of the tribe are subdivided in similar ways. At least among some tribes there are two distinct groups of shamans, which have an organization similar to the family organization.

The form of ritual that has been described here is not confined to the sacred ceremonial, but is also used in the ceremonial admission of a man to the privileges of a family, or at other festivities that are of importance in the life of the family.

Among the Kwakiutl the family legend is often performed by means of pantomime at the time of marriage, the legendary marriage of the ancestor of the family being used as a subject of such performance. Among the more northern tribes, the acquisition of the crest is often presented in a similar way. Thus we have records of a performance among the Bella Bella in which an artificial rock was anchored in front of the village. The young man who was to assume his position in the family appeared as coming out of the rock, the performance being a pantomimic representation of the clan legend according to which the ancestor of the clan had obtained his privileges from the master of a certain small island.

The mythological concepts of the northwest coast Indians cluster around the Raven legend. On the northern part of the coast the Raven tradition accounts for the world as it appears at the present time. The same kind of traditions are also found on the southern part of the coast, but in somewhat different combinations. The general concept of the world is not quite definite. The Haida, the Tlingit and Tsimshian believe the earth to be four-cornered and to rest on a pole, which is supported on the lower world. The country of the souls is believed to be either in the lower world or at the outskirts of our world. Other souls, however, are believed to be able to visit the villages. The sky is conceived as another world, which may be reached by passing through a hole in the sky. The Bella Coola take quite an exceptional position in regard to these general concepts. Their mythological ideas, although in their material identical with those of other northwest coast tribes, have been highly systematized. They believe that there are five worlds, two lower worlds, our own world, and two upper worlds. Our own world is held in the east by a giant, while in the west stands the pillar of sunset. The sun travels over a wide trail along the sky, on which two beings are placed, one guarding the summer solstice, the other the winter solstice. In the zenith is the house of the gods, whose chiefs are the sun and his brother. The thoughts of these gods are transformed into action by four brothers, who mediate between the gods and mankind. The winter ceremonial referred to before is in charge of a woman who lives in a cave. As long as her cave is closed the secular season lasts, while as soon as it opens the sacred season begins. The opening and closing of her cave is determined by the arrival and departure of the canoe containing the spirits of the winter ceremonial. The whole



mythology of the Bella Coola is grouped around these concepts, although, of course, a good deal of loose material, more or less disconnected, is also in existence.

It seems that according to the ideas of the Indians the present conditions of the world have always prevailed. However, in regard to many details the world was incomplete. Thus, according to the ideas of the Haida, there was in the beginning only sky and water, and a single rock on which the supernatural beings lay. Then the Raven created the mainland and the Queen Charlotte Islands from two stones. The trees had to be created. There was no sun nor moon nor stars. These were owned by a chief, who kept them suspended from the rafters of his house, well protected, in a box. The Raven allowed himself to be born as an infant in this chief's house, and then cried until the box was given to him. Eventually he took it away, broke it, and thus liberated the sun. He obtained the fire from a chief, who was its sole possessor. According to one version of this legend, he assumed the shape of a deer, tied shavings to his tail and lighted them by the fire, then ran away, setting fire to the woods, thus bringing fire for his own use and for that of man. He obtained fresh water by getting permission, by an artful device, to drink from the only well in existence and owned by a chief. Then he flew away and scattered the water all over the earth, thus creating rivers and lakes. He brought the salmon by carrying away the daughter of the chief of the salmon, and throwing her into the river. Tales of this character describing the feats of the Raven, by means of which he benefited mankind, are very numerous. There is, however, another large number of tales in which the Raven appears as a trickster, who tries to cheat every person he meets, and who is generally vanquished. Thus, the well known story of the imitation of the host, who, by means of magic, produces food, is told of the Raven. He tries to imitate the magical performances of his host, but fails. While the seal fills a dish with oil by holding his hands near the fire, the Raven, who tries to do the same, scorches his hands, which accounts for his black feet. Coarse and obscene tricks abound in this group of stories.

Analogous traditions are told along the southern part of the coast among the Kwakiutl and Salish tribes, partly of a human being, who is not identified with the Raven, partly of the Mink. The stories told of these beings are, however, not characteristic transformation stories, but rather a group of trickster stories. The transformation stories in this region are told of another being, human in character, who appears as a true culture hero, and one of whose functions is the introduction of the institutions found among these tribes at the present time. The culture hero transforms one hostile person into a deer, another into a raccoon. He travels all over the country killing monsters and restoring people to health. He meets all the ancestors of the various families and gives them the privileges which they possess at the present time. It is worth remarking that the culture hero is distinctly stated to belong to the uninitiated, and to be afraid of the sacred winter ceremonies, which play such an important part in the religious life of the tribes. Excepting the few tales of the transformation of men into animals, the culture hero is not a transformer who gives the world its present shape, but rather finds the world as it now is. There is no such connected account of the origin of phenomena found at the present time among the Kwakiutl and Salish tribes as is found further to the north in the Raven legend.

Besides the Raven myth, the northern tribes have a great number of stories which are essentially human in their composition. They treat of the events which happen in certain towns, bringing in, however, many supernatural elements. Many of these traditions are very long and complex, and consist evidently of a series of disconnected stories, which are centered around a favorite hero. The acquisition of privileges from supernatural beings, escapes from the all-destroying fire, and similar incidents, are prominent among these stories.

Tsimshian mythology, although it shares many of these characteristics with the tales of coast tribes, bears traces of a number of elements that do not occur in any other part of the north Pacific coast. Tsimshian mythology, in many respects, is the mythology of an inland people, and it shows close affiliation with the traditions of the Athapascan tribes and of other tribes of the plateaus. This is indicated, for instance, by the frequent occurrence of fairly short animal tales relating to contests between animals. To a certain extent these are similar to European fables. To this class belongs the story of the wolves and the deer, who have a laughing contest, in which the wolves induce the deer to open their mouths. When they see that the deer have no teeth, they devour them. To this group also belongs the story of a council of the animals, in which the animals appear as true animals, although endowed with reason and with the power to speak. They are, however, not individuals, like the Raven of the Tlingit or the Coyote of the tribes of the interior, but simply representations of their species. Another tradition of the Tsimshian, which illustrates the presence of foreign elements, is that of the origin of the sun. According to this tale, the animals hold a council and draw lots who is to be the sun, and, after a number of fruitless attempts, moon. A general review of the elements of Tsimshian mythology shows very clearly the presence of many foreign elements which point toward the interior.\*

\*A. Krause. *Die Tlinkit—Indianer*. Jena, 1885.

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# Archæological Report

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## PRESENTATION.

HON. R. A. PYNE, M.D., M.P.P.

*Minister of Education for Ontario.*

SIR,—Herewith I have the honor to present to you the Archæological Report for 1906.

The accessions to the museum during the year include two exchanges—one from the Imperial Museum, Tokio, Japan; and one from the Australian Museum, Sydney, N.S.W.

By purchase, we secured a fine collection from the Rev. R. W. Large, M.D., of Bella Bella, British Columbia.

To the Rev. C. E. Whittaker, of Mackenzie District, we owe many thanks for his gift of ethnological material illustrative of native life among the Loucheux and the Eskimo of Yukon territory.

A miscellaneous collection was purchased from Mr. H. A. Van Winckel of Kingston, Ont.

From our friend, Mr. Clarence B. Moore, we have received numerous excellent specimens in shell and stone, found in the mounds of Florida.

The names of others will be found in the list of "Additions to the Museum" following.

I have the honor to be,

Yours very respectfully,

DAVID BOYLE.





## ADDITIONS TO THE MUSEUM.

- 27,239 Headless bird pipe, found 1903, on J. J. Finney's farm, by his son, Burnt River P.O. The farm is four miles south of Rettie's station, Midland Ry., Somerville tp., Victoria co., Ont. Said to have been found in a grave containing three skeletons, near a village site. Per G. E. Laidlaw.
- 27,240 Animal head from pipe, Brown's site, Fenelon tp., per Dr. Jas. Grant, Victoria Rd. P.O.
- 27,241 Basuto pipe, South Africa; said to be native make, but looks like a trader's pipe, per G. E. Laidlaw.
- 27,242 Gouge and axe, Bob's lake, Bedford tp., John Bay, Cloyne.
- 27,243 Axe, Bob's lake, Bedford tp., John Bay, Cloyne.
- 27,244 Flint, Bob's lake, Bedford tp., John Bay, Cloyne.
- 27,245-6 Arrow-heads, Bob's lake, Bedford tp., John Bay, Cloyne.
- 27,247-8 Arrow-heads, lake Massanog, Barrie tp., John Bay, Cloyne.
- 27,249 Flint, lake Massanog, Barrie tp., John Bay, Cloyne.
- 27,250 Button or bead, Gull lake, Barrie tp., John Bay, Cloyne.
- 27,251 Chisel or axe, Gull lake, Barrie tp., John Bay, Cloyne.
- 27,252 Axe, Gull lake, Barrie tp., John Bay, Cloyne.
- 27,253 Gouge, Gull lake, Barrie tp., John Bay, Cloyne.
- 27,254 Broken axe, lake Massanog, Barrie tp., John Bay, Cloyne.
- 27,255 Axe or wedge, Loon lake, Anglesea tp., John Bay, Cloyne.
- 27,256 Axe, Loon lake, Anglesea tp., John Bay, Cloyne.
- 27,257 Small chisel, Loon lake, Anglesea tp., John Bay, Cloyne.
- 27,258 Gouge, Rideau canal, near Westport, John Bay, Cloyne.
- 27,259 Gouge, Rideau canal, near Westport, John Bay, Cloyne.
- 27,260 Rubbing stone, Rideau canal, near Westport, John Bay, Cloyne.
- 27,261 Piece of argillite, Barrie tp., John Bay, Cloyne.
- 27,262 Pipe, lake Massanog, Barrie tp., John Bay, Cloyne.
- 27,263 Pipe, Anglesea tp., John Bay, Cloyne.
- 27,264 Broken axe, Bob's lake, Bedford tp., John Bay, Cloyne.
- 27,265-8 Flints, Rideau valley, Lanark co., Dr. T. A. Beeman, Perth.
- 27,269-70 Arrow-heads, Bobs Lake, Lanark co., Dr. T. W. Beeman, Perth.
- 27,271-2 Pieces of soapstone pipes, Lanark co., Dr. T. W. Beeman, Perth.
- 27,273 Pipe, Six Nations, Brantford, Chief Hill.
- 27,274 Flint scraper (degraded,) Pilkington tp., Wellington co., D. Boyle.
- 27,275 Large carved war club, Santo Island, New Hebrides.  
Van Winckel Collection.
- 27,276-98 Arrowheads, and flints, some fine specimens, from Wolfe Island, Ont.
- 27,298-327 Arrowheads and flints, from Richland, Mo.
- 27,328-33 Arrowheads and flints, from Pittsburg tp., Ont.
- 27,334-37 Arrowheads and flints, from Millhaven, Ont.
- 27,338 Arrowhead, from Orillia, Ont.
- 27,339 Arrowhead, from Simcoe Island, Ont.

- 27,340 Copper arrowhead, found at Cape Vincent, N.Y.  
 27,341-55 Beads made from crinoid sections, Woodstock, Ont.  
 27,356 Slingstone, Mt. Morris, N.Y.  
 27,357 Stone bead or spindle-whorl, W. Va.  
 27,358-9 Brass bracelets, found with skeleton, at Lethbridge, Alta.  
 27,360 Shell bead, Orillia, Ont.  
 27,361 Shell bead, Trenton, Ont.  
 27,362-4 Women's slate knives, Wolfe Island, Ont.  
 27,365-7 Women's slate knives, Simcoe Island, Ont.  
 27,368 Clay pipe, Wolfe Island, Ont.  
 27,369 Soapstone pipe, highly polished, Pittsburg tp. Frontenac co., Ont.  
 27,370 Soapstone pipe, unfinished, Pittsburg tp., Frontenac co., Ont.  
 27,371 Soapstone pipe, very good, Richland, Mo., U.S.A.  
 27,372-5 Fragments of pipes, Trenton, Ont.  
 27,376-7 Pottery markers, Wolfe Island, Ont.  
 27,378-9 Bone awls, Trenton, Ont.  
 27,380-1 Celts or axes, Parham, Frontenac co., Ont.  
 27,382 Gouge, Parham, Frontenac co., Ont.  
 27,283-6 Celts or axes, Middlesex co., Ont.  
 27,387-90 Celts or axes, Wolfe Island, Ont.  
 27,391-2 Broken gouges, Wolfe Island, Ont.  
 27,393-5 Celts or axes, near Kingston, Ont.  
 27,396-7 Celts or axes, Pittsburg tp. Frontenac co., Ont.  
 27,398 Gouge, Battersea, Frontenac co., Ont.  
 27,399 Celt or axe, Battersea, Frontenac co., Ont.  
 27,400 Gouge, very fine, Amherst Island, Ont.  
 27,401 Gouge, Ernestown sta., Lennox co., Ont.  
 27,402 Celt or axe, Trenton, Ont.  
 27,403-4 Stone pestles, W. Va.  
 27,405 Gorget, one hole, Wolfe Island, Ont.  
 27,406 Gorget, one hole, Simcoe Island, Ont.  
 27,407-8 Banner stone, very fine, Richland, Mo.  
 27,409 Banner stone, not bored, Simcoe Island, Ont.  
 27,410 Banner stone, not bored, London, Ont.  
 27,411 Monitor stone pipe, unfinished, Wolfe Island, Ont.  
 27,412 Grooved axe, Richland, Mo.  
 27,413 Piece of worked stone, used for polishing, Wolfe Island, Ont.  
 27,414 Soapstone bead or small banner-stone, Wolfe Island, Ont.  
 27,415 Small celt, Amherst Island, Ont.  
 27,416 Piece of serpentine, round and pointed, Wolfe Island, Ont.  
 27,417-22 Fragments of pottery, from different parts of Ontario.  
 27,423 Small hematite celt, W. Va.  
 27,424 Piece of galena.
- 
- 27,425 Buckskin Jacket, Tuscarora Reserve, Captain Bill.  
 27,426 Totem pole of black slate, British Columbia.  
 27,427-9 Three poisoned arrows, barbed, South Sea Islands.  
     Exchange from The Australian Museum, Sydney, N.S.W.  
 27,430 Boomerang, (Kiley) Victoria Plains, East, Western Australia.  
 27,431 Boomerang, (old type) Macquarie R., N.S.W.

- 27,432 Boomerang, (Kiley) Menzies District, Western Australia.  
 27,433 Boomerang, (Kiley) Menzies District, Western Australia.  
 27,434 Boomerang, (leaf type) Bourke, Western N.S.W.  
     The foregoing are all return boomerangs.  
 27,445 Boomerang, (non-return) Carandatta, Georgina R., W. Queensland, Australia.  
 27,436 Boomerang, (hook), Central Australia. When well thrown the hook will swing on adversary's weapon, striking him.  
 27,437 Shield (mulga type) Dubbo, N.S.W. Used to ward off Mulla or Waddy blows.  
 27,438 Shield, (Goolmarry type) Queensland, Australia.  
 27,439 Womera, (Mendi) Mapoon, Batavia R., North Western Queensland.  
 27,440 Womera, (thick type) Booraloola, McArthur R., Gulf of Carpentaria.  
 27,441 Womera, (Chinainggoo) South Alligator River, Northern Territory, Australia.  
 27,442 Nulla Nulla, waddy or club, (phallic headed) New England, N.S.W.  
 27,443 Nulla Nulla, (pronged) Broad Sound, East Central Queensland.  
 27,444 Nulla Nulla, (ordinary type) Broad Sound, East Central Queensland.  
 27,445 Nulla Nulla, (ordinary type) South Australia.  
 27,446 Nulla Nulla, (shewing flutings) Menzies District, W. Australia.  
 27,447 Stone axe or Tomahawk, (Kidjoo) mounted in handle. Central North West Kimberley, W. Australia.  
 27,448 Stone axe (unmounted) West N.S. Wales.  
 27,449 Stone axe (unmounted) Guntawang, N.S.W.  
 27,450 Stone axe (unmounted) Lachlan R., N.S.W.  
 27,451 Top stone or muller, cobar, N.S.W. Used in conjunction with a larger lower stone for grinding seed.  
 27,452 Glass spear head, Kimberley, W. Aust.  
 27,453 Glass spear head, Kimberley, W. Aust.  
 27,454-5 Firesticks, the working ends in protective sheath. To produce fire the upright stick or drill is twirled by the hands in the other stick with the cup-like hole, the latter being held in position by the feet of the operator. Annan River, Queensland, Aust.  
 27,456 Firesticks (Ingurarthoo), same method as above, South Alligator River, Northern Territory, Aust.  
 27,457 Native bark cloth, used as a mat to lie on, Cairns, East Central Queensland.  
 27,458 Reed "dilly basket" (Mboga), Mapoon, Batavia River, W. Queensland.  
 27,459 Red pigment (Wilgee) for painting weapons and for personal decoration, Kimberley, W. Aust.  
 27,560 Vegetable gum (prepared) used as a cement, Kimberley, W. Aust.  
 27,561 Human hair belt (male), "Binbinga" tribe, Gulf of Carpentaria.  
 27,562 Cord belt, worn by males, sometimes around the neck, Anula tribe, Gulf of Carpentaria.



- 27,563 Belt (Tchili) ornamented with strips of rock lily work (Dendrobium sp.) Mapoon, Batavia River, Aust.
- 27,564 Woman's head band, "Kaitish Tribe," Central Aust.
- 27,565 Woman's head band, "Kaitish Tribe," Central Aust.
- 27,565a Necklet, Alligator River, Northern Territory of South Aust.
- 27,566 Necklet (Murrandin), Central Alligator River, Northern Territory of South Australia. Grass section on bugles.
- 27,567 Nose style, a bird wing bone worn through nasal septum, "Binginga Tribe," McArthur River, Northern Territory of South Aust.
- 27,568 Armlet, (Merrerrun) South Alligator, Northern Territory of South Aust.
- 27,569 Armlet, split cane, "Mara Tribe," McArthur River, Northern Territory of South Aust.
- 27,570 Armlet, wood bound with string, McArthur River, Northern Territory of South Aust.
- 27,571 Spear (Wooka), heavy, flat-pointed, Georgian River, West Queensland, Aust.
- 27,572 Spear (Cadjee) barbed, E. Murchison, West Aust.
- 27,573 Spear (Quartzite headed), Alligator River, N. Territory of South Aust.
- 27,574 Spear (plain wood), West Aust.
- 27,575 Spear (for fish), Townsville, Queensland, Aust.
- 27,576 Spear (for fish), Gilbert River, Queensland, Aust.
- 27,577 Spear (Goss pointed), Oscar Ranges, West Aust.
- 27,578 Spear (Funny) *native name*, Mapoon, Batavia River, Queensland, Aust.
- 27,579 Spear (double ended), North Queensland, Aust.
- 27,580 Spear (Multibarbed), Port Essington, Northern Territory, Aust.
- 27,581 Spear (Multibarbed), Port Essington, Northern Territory, Aust.
- 27,582 Shell adze, Mortlock Island, Caroline Group.
- 27,583 Adze (Volcanic tuff), British New Guinea.
- 27,584 Axe, British New Guinea.
- 27,585 Stone adze or axe, Uji, Solomon Islands, S. Pacific.
- 27,586 Stone adze or axe, Uji, Solomon Islands, S. Pacific.
- 27,587 Jade adze or axe, Collingwood Bay, British New Guinea.
- 27,588 Adze (Volcanic tuff), British New Guinea.
- 27,589 Adze, Samoa, Navigator Islands, S. Pacific.
- 27,590 Axe (Jade) New Caledonia, S. Pacific.
- 27,591 Adze, Samoa, Navigator Islands, S. Pacific.
- 27,592 Nobbed club, Fiji Islands, S. Pacific.
- 27,593 Discoid stone headed club, Rigo District, British New Guinea.
- 27,594 Nobbed stone headed club, Mambare River, British New Guinea.
- 27,595 Club, New Ireland, S. Pacific.
- 27,596 Club (spatulate), New Ireland, S. Pacific.
- 27,597 Club, New Britain, S. Pacific.
- 27,598 Club (bent), Reiva, Viti, Levu, Fiji Group.
- 27,599 Dancing club, New Ireland, S. Pacific.
- 27,600 Sword club (plaited), Solomon Group, S. Pacific.
- 27,601 Bow, New Hebrides, S. Pacific.
- 27,602 Bow, Erromanga, New Hebrides.
- 27,603 Arrow, New Hebrides, S. Pacific.

- 27,604 Arrow, New Hebrides, S. Pacific.  
27,605 Arrow, New Hebrides, S. Pacific.  
27,606 Arrow, New Hebrides, S. Pacific.  
27,607 Arrow, New Hebrides, S. Pacific.  
27,608 Arrow, New Hebrides, S. Pacific.  
27,609 Arrow, New Hebrides, S. Pacific.  
27,610 Arrow, Erromanga, New Hebrides, S. Pacific.  
27,611 Arrow, Erromanga, New Hebrides, S. Pacific.  
27,612 Arrow, Erromanga, New Hebrides, S. Pacific.  
27,613 Arrow, (point human bone), Erromanga, New Hebrides.  
27,614 Arrow, (point human bone), Erromanga, New Hebrides.  
27,615 Arrow, (point human bone), Erromanga, New Hebrides.  
27,616 Arrow, (point human bone), Erromanga, New Hebrides.  
27,617 Arrow, (point human bone), Erromanga, New Hebrides.  
27,618 Arrow, (point human bone), Erromanga, New Hebrides.  
27,619 Arrow, (point human bone), Erromanga, New Hebrides.  
27,620 Arrow, (point human bone), Erromanga, New Hebrides.  
27,621 Arrow, (point human bone), Erromanga, New Hebrides.  
27,622 Arrow, (point human bone), Erromanga, New Hebrides.  
27,623 Bow, British New Guinea.  
27,624 Arrow, British New Guinea.  
27,625 Arrow, Vanu River, British New Guinea.  
27,626 Arrow, British New Guinea.  
27,627 Arrow, British New Guinea.  
27,628 Arrow, British New Guinea.  
27,629 Arrow, British New Guinea.  
27,630 Arrow, British New Guinea.  
27,631 Arrow, British New Guinea.  
27,632 Arrow, British New Guinea.  
27,633 Arrow, British New Guinea.  
27,634 Arrow, British New Guinea.  
27,635 Arrow, British New Guinea.  
27,636 Arrow, British New Guinea.  
27,637 Arrow, British New Guinea.  
27,638 Bow, Solomon Group.  
27,639 Arrow, Solomon Group.  
27,640 Arrow, Bonka, Solomon Group.  
27,641 Arrow, Admiralty Island.  
27,642 Arrow, Solomon Group.  
27,643 Arrow, Solomon Group.  
27,644 Arrow, Admiralty Island.  
27,645 Arrow, Solomon Group.  
27,646 Arrow, Solomon Group.  
27,647 Arrow, Solomon Group.  
27,648 Arrow, Solomon Group.  
27,649 Arrow, Bonka, Solomon Group.  
27,650 Arrow, Bonka, Solomon Group.  
27,651 Arrow, British New Guinea.  
27,652 Arrow, Solomon Group.  
27,653 Arrow, Bonka, Solomon Group.  
27,654 Arrow, Solomon Group.  
27,655 Arrow, Solomon Group.

- 27,656 Arrow, British New Guinea.
- 27,657 Arrow, Solomon Group
- 27,658 Arrow, Bonka, Solomon Group.
- 27,659 Arrow, Solomon Group.
- 27,660 Arrow, Solomon group.
- 27,661 Arrow, Solomon group.
- 27,662 Arrow, Bonka, Solomon group.
- 27,663 Arrow, Solomon group.
- 27,664 Arrow, Solomon group.
- 27,665 Arrow, British New Guinea.
- 27,666 Arrow, Bonka, Solomon group.
- 27,667 Paddle, Matty Is., South Pacific.
- 27,668 Drum or "tom tom," British New Guinea.
- 27,669 Lime gourd, British New Guinea.
- 27,670 Cocoanut ladle, Admiralty Is.
- 27,671 Netting needle, Collingwood Bay, Brit. New Guinea.
- 27,672 Needle, Greenwich Is., South Pacific.
- 27,673 Rope-making implements, British New Guinea.
- 27,674 Cocoanut spoon, British New Guinea.
- 27,675 Cocoanut cup, British New Guinea.
- 27,676 Cocoanut cup, British New Guinea.
- 27,677 Obsidian headed spear, Admiralty Is.
- 27,678 Obsidian headed spear, Admiralty Is.
- 27,679 Obsidian headed spear, Admiralty Is.
- 27,680 Obsidian headed spear, Admiralty Is.
- 27,681 Obsidian headed spear, Admiralty Is., ornamented with Job's  
tear seeds, coix lachryma Linn.
- 27,682 Obsidian headed spear, ornamented with Job's tear seeds (coix  
lachryma Linn), Solomon Islands, South Pacific.
- 27,683 Barbed spear, Solomon Islands, South Pacific.
- 27,684 Barbed spear, Solomon Islands, South Pacific.
- 27,685 Spear, burnt-in ornament on shaft, Admiralty Is., South Pacific.
- 27,686 Spear, burnt-in ornament on shaft, Admiralty Is., South Pacific.
- 27,687 Palmwood spear, British New Guinea.
- 27,688 Palmwood spear, British New Guinea.
- 27,689 Spear (bamboo point) for pigs, Brit. New Guinea.
- 27,690 Spear, New Ireland South Pacific.
- 27,691 Spear, New Ireland, South Pacific.
- 27,692 Spear (barbed), Matty Is., South Pacific.
- 27,693 Spear (barbed), Matty Is., South Pacific.
- 27,694 Spear (four pronged), Matty Is., South Pacific.
- 27,695 Fish-hook and line, Mortlock Is., Caroline group.
- 27,696 Fish-hook and line (Bawonga), Funafuti, Ellice group.
- 27,697 Fish-hook and line, Funafuti, Ellice group.
- 27, 98 Shark-hook, Admiralty Is., South Pacific.
- 27,699 Fish-hook, line and float, Brit. New Guinea.
- 27,700 Massi or Tappa cloth, Fiji Is., South Pacific.
- 27,701 Tappa dress, Tonga, Friendly Is., South Pacific.
- 27,702 Matting belt, New Hebrides, South Pacific.
- 27,703 Tappa cloth, Stewart Is., South Pacific.
- 27,704 Fan, Raratonga, Harvey or Cook Is.
- 27,705 Bone dagger (Cassowary tibia), Brit. New Guinea.



- 27,706 Turtle bone knife, (sesefonu), used for extracting cocoanut, Funafuti, Ellice group.
- 27,707 Turtle shell knife, British New Guinea.
- 27,708 Sling, British New Guinea.
- 27,709 Sling, Cape Lambert, New Britain.
- 27,710 Comb (head ornament), Admiralty Is.
- 27,711 Pearl shell knife (Di-a), Funafuti, Ellice group.
- 27,712 Jew's harp (musical inst.), Brit. New Guinea.
- 27,713 Pandean pipes, Brit. New Guinea.
- 27,714 Armlet (trochus niloticus), Brit. New Guinea.
- 27,715 Armlet (trochus niloticus), Brit. New Guinea.
- 27,716 Armlet (trochus niloticus), Brit. New Guinea.
- 27,717 Armlet (cocoanut shell), Wanigela, Brit. New Guinea.
- 27,718 Armlet (sifi or sifu), Collingwood Bay, Brit. New Guinea.
- 27,719 Armlet (conus millepunctatus), Brit. New Guinea.
- 27,720 Armlet (conus millepunctatus), Brit. New Guinea.
- 27,721 Armlet, Job's tear seeds worn in mourning, Wanigela, Collingwood Bay, Brit. New Guinea.
- 27,722 Shell breast-ornament (orulum ovum), Brit. New Guinea.
- 27,723 Nose ornament (worn in septum), Brit. New Guinea.
- 27,724 Ear ornament (mourning), Wanigela, Brit. New Guinea.
- 27,725 Ear ornament (kakura or kaibera), Job's tear seeds (coix lachryma Linn), Wanigela, Collingwood Bay, Brit. New Guinea.
- 27,726 Belt (ornamented with shells), Brit. New Guinea.
- 27,727 Head ornament, worn upright over ears, shells to front, Brit. New Guinea.
- 27,728 Shell girdle (nassa grandifera), Mortlock Is., Caroline group, South Pacific.
- 27,729 Wrist ornament, worn only by chiefs (ovula verrucosa), Brit. New Guinea.
- 27,730 Rattle-seed necklet, Espiritu Santo, North New Hebrides.
- 27,731 Necklet (banana seeds), Mambare River, Brit. New Guinea.
- 27,732 Necklet (oliva carneola), Brit. New Guinea.
- 27,733 Necklet (shell section and seeds), Erromanga, New Hebrides.
- 27,734 Necklet (shells, melampus luteus), Gilbert Group, South Pacific.

Numbers 27,735-27,750 presented by Rev. C. E. Whittaker, Herschel Island, Yukon.

- 27,735 Woman's knife (slate).
- 27,736-7 Net making tools.
- 27,738 Horn knife.
- 27,739 Ice chisel.
- 27,740 Eskimo scraper.
- 27,741 Eskimo sinker
- 27,742-44 Spears (slate) Eskimo.
- 27,745-48 Women's knives "imperfect."
- 27,749 Comb.
- 27,750 Comb.

Numbers 27,751-27,809 presented by Clarence B. Moore, Philadelphia, from Florida.

- 7,751-2 Shell implement or tool, Crystal, R., Citrus Co.

- 27,753 Shell implement or tool, Goodland Pt., Lee Co.
- 27,754 Shell implement or tool, Gilberts, Lee Co.
- 27,755 Shell implement or tool, Marco, Key Mares, Lee Co.
- 27,756 Shell implement or tool, Goodland Pt., Lee Co.
- 27,757 Shell implement or tool, Marco, Lee Co.
- 27,758-60 Shell implement or tool, Chokoloskee, Lee Co.
- 27,761-2 Shell implement or tool, Marco, Lee Co.
- 27,763-9 Shell implement or tool, Marco, Lee Co.
- 27,770 Shell and implement, Goodland Pt., Lee Co.
- 27,771 Shell implement or tool, Chokoloskee, Lee Co.
- 27,772 Shell implement or tool, Goodland Pt., Lee Co.
- 27,773-4 Shell implement or tool, Marco, Lee Co.
- 27,775 Shell implement or tool, Chokoloskee, Lee Co.
- 27,776-86 Shell sinkers, Marco, Lee Co
- 27,787-8 Small shells. Marco, Lee Co.
- 37,789-809 Stone sinkers, Marco, Lee Co.
- 27,810 Mealing stone, Auburn, N.Y., E. C. Waters.

Numbers 27,811-27,833 taken from Mound at Port Colborne

- 27,811 Fine clay pot.
- 27,812-3 Fine clay pipes.
- 27,814-5 Fragments of clay pot.
- 27,816 Large shell breast ornament.
- 27,817 Record bone.
- 27,818 Brass kettle.
- 27,819 Bone comb.
- 27,820 Shell rattle
- 27,821-2 Shell beads.
- 27,823 Shell bead or ornament.
- 27,824 Shell bead or ornament.
- 27,825-6 Arrow-heads.
- 27,827 Shell bead ornament.
- 27,828 Iron knife.
- 27,829 Glass bead.
- 27,830 String small brass beads.
- 27,831 Box of glass and shell beads.
- 27,832 Brass pendant.
- 27,833 Brass and iron bracelet.

Numbers 27,834-27,841 presented by Miss Alexander, Hong Kong, China.

- 27,834 Chinese calculating device. (*abacus*).
- 27,835 Chinese palm leaf hat
- 27,836 Chinese model or device, the original of which is fastened to the necks of children who live in river boathouses, to protect them from drowning by an accidental fall into the river.
- 27,837 Chinese axe.
- 27,838 Chinese straw sandals, probably for indoor use.
- 27,839 Chinese device for collecting the evil spirits from the body of an infant after death. It is then folded and burned.
- 27,840 Chinese little black devil.
- 27,841 Chinese palm-leaf rain coat.

- 27,842 Anklets, South Africa, Dr. Beeman.  
27,843 Confederate five dollar bill. Got from Confederate officer at  
Niagara-on-the-Lake, 1869. C. W. Nash.  
27,844 Stone pipe, representing some bird. Mrs. James, Port Perry.  
27,845 Samples of Manganese of Iron, Quebec. Mr. Morrison.  
27,846 Pemican bag. H. A. Van Winckel, Kingston.

Numbers 27,847 to 27,977 from R. W. Large, Bella Bella, British Columbia.

- 27,847 Indian carved box for dance masks.  
27,848 Cedar cooking box.  
27,849 Tongs for hot stones for cooking.  
27,850-4 Halibut fish-hooks.  
27,855-6 Carved sticks, "Indian Cradle Supports."  
27,857 Big spoon, (plain)  
27,858 Small stone axe.  
27,859-60 Stone axes, with handles, as used in getting cedar boards  
from a tree.  
27,861 Bone implement, for removing inner bark from hemlock.  
27,862 Wooden dipper.  
27,863 War club handle.  
27,864 New Wood Box, old model.  
27,865 Copper rattle.  
27,866 Painted war club.  
27,867 Large dance whistle.  
27,868-9 Small black slate totems.  
27,870 Carved slate-knife.  
27,871 Scalloped edge dance implement, "Official Sceptre."  
27,872 Painted clam shell.  
27,873 Small extension basket.  
27,874 Dance drinking box.  
27,875 Dance mask.  
27,876-7 Baskets.  
27,878 Cedar dance hat.  
27,879 High crown dance hat.  
27,880 Large food box.  
27,881 Water box.  
27,882 Carved ceremonial wand.  
27,883-4 Large silver bracelets.  
27,885 Silver brooch.  
27,886 Silver stick pin.  
27,887 Pair of silver ear-rings.  
27,888-93 Assorted horn spoons.  
27,894-6 Small coppers.  
27,897-8 Copper bead ornaments.  
27,899-900 Bone discs.  
27,901 Stone knife.  
27,902-5 Gambling "sticks" (bone).  
27,906 Bone chisel.  
27,907 Whalebone cedar bark beater.  
27,908-9 Seal-bone gamblers  
27,910 Bird from dance mask.



- 27,911 War spear "carved whalerib point."  
27,912 Small cedar mat.  
27,913-4 Copper bracelets. "One of native copper."  
27,915-8 Carved stone hammers, "flat," for driving stakes in river bed.  
27,919-22 Stone war clubs,—one on handle.  
27,923 Carved stone halibut sinker.  
27,924-30 Gambling discs, "stone."  
27,931-2 Cylindrical stones used as hammers.  
27,933-42 Stone axes.  
27,943-65 Gambling stones.  
27,966 Doctor's "floating stone" (pumice).  
27,967 Stone charm.  
27,968-77 Stone fragments of various relics.
- 27,978 Mealing stone, E. C. Watters, Auburn, N.Y.  
27,979-84 Six skulls, taken from mound at Port Colborne. W. H. C. Phillips.  
27,985 Piece of pottery, Cliff Dwellers, Arizona, John W. Stovall, Miss.  
27,986 Tail of a rattlesnake, John Toothe, Penticton, B.C.  
27,987 Clay pipe, "French," John Toothe, Penticton, B.C.  
27,988 Pieces of pottery, Cliff Dwellers, Arizona, John W. Stovall, Miss.  
27,989 Black slate pipe, inlaid with lead, N.W.T.  
27,990 Mauser rifle, used by the Boers in South Africa, presented by  
by Dominion Govt.
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## POTTERY.

The very fine clay pot of which fig. 1 gives a good idea, was found in a mound near Port Colborne, by Mr. W. H. C. Phillips, Assistant Curator, in September.

This mound has already been referred to in our report for 1888-9, page 18.

It forms part of the property formerly known as Solid Comfort Camp, now the Humberstone Club, lying close to Lake Erie.

The Tennessean campers made the discovery that the mound in question was of artificial formation when they were digging a hole for

a flag-pole. Ever since it has been our desire to make something like a thorough examination of the mound, which has recently come into the possession of Mr. James P. Kock, a resident of Louisiana, who kindly gave us permission to do so through C. E. Steele, Esq., warden of the county of Welland. This opportunity came to us during my absence from Toronto, but Dr. Colquhoun, Deputy Minister of Education, promptly

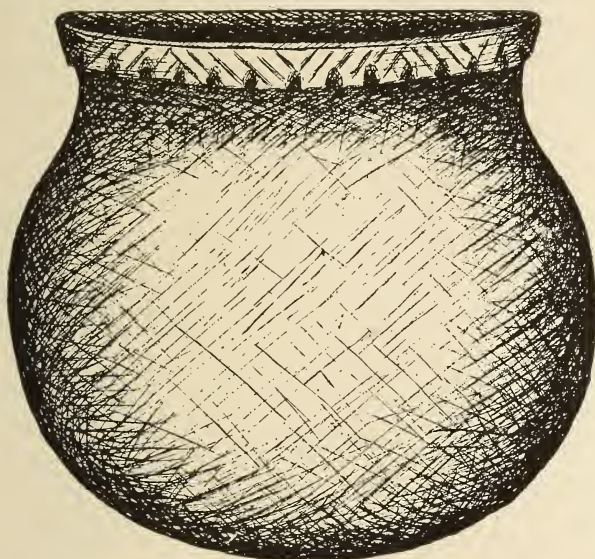


Fig. 1.  $\frac{3}{8}$  dia (27,811)

authorized Mr. W. H. C. Phillips to proceed at once to the spot, the result being confirmatory of the belief that the mound had been constructed for a place of burial, as the remains (bones) of fully fifty persons were found at a depth of about five feet from the surface. All the skeletons were doubled up, and lying on their sides. In one instance a group of bodies radiated in this way, the heads being within a foot of a small brass pot some seven or seven and a half inches in diameter. As a matter of course therefore the burials were thus connected in point of time with a date subsequent to that of European occupation of the country, although this does not necessarily imply that Europeans had found their way so far west at that time, but even this contingency was not impossible. Other objects included ornaments and beads of shell (*busycon perversum*) glass beads of several kinds and the blade of an iron knife. This combination points clearly to a time of overlapping, perhaps as early as the first half of the seventeenth century.

Mr. Phillips succeeded in procuring six very well preserved skulls from the mound. The people were most likely of Huron-Iroquois stock—Neutrals or Attiwandarons.

It may come as a surprise to many on this continent to learn that until very recently (perhaps, even now) pottery of this kind was made in several of the Scottish Islands, where the vessels are known as craggans.

Dr. Arthur Mitchell, author of "The Past in the Present—What is Civilization?" states that when he visited the Island of Lewis, in 1863, he found "that at a period by no means remote they (craggans) had been made in many of the villages of the Lewis," though at the time of the visit "their manufacture was chiefly, if not entirely, confined to Barvas," a village in the Island.

He was told that it was the woman's work to make the craggans, and having secured an interview with one of the makers who was "pointed out as particularly skilful," she described to him the process of manufacture. Dr. Mitchell proceeds: "The clay she used underwent no careful or special preparation. She chose the best she could get, and picked out of it the larger stones, leaving the sand and finer gravel which it contained. With her hands alone she gave to the clay its desired shape. She had no aid from anything of the nature of a potter's wheel. In making the smaller craggans, with narrow necks, she used a stick with a curve on it to give form to the inside. All that her fingers could reach was done with them. Having shaped the craggan, she let it stand for a day or two to dry, then took it to the fire in the centre of the floor of her hut, filled it with burning peats, and built burning peats all round it. When sufficiently baked she withdrew it from the fire, emptied the ashes out, and then poured slowly into it and over it about a pint of milk to make it less porous."

In a foot-note to this paragraph we read:—The following notes are taken from a letter addressed to Mr. William MacGillivray, W.S., by Dr. Alexander Buchanan of Tiree, where craggans of small size are still occasionally made. He says that the only craggans now made in Tiree are small globular vessels in which, milk drawn directly into them from the cow is warmed and given to persons showing a tendency to consumption. Milk so treated is said to be "milk without wind," and is supposed by the people to have special curative qualities. I had to take this treatment myself on Whitehill Farm, near Old Cumnock, Ayrshire, not for any particular ailment, but just on general principles. My good Aunt Agnes made me stand beside her as she milked "Kennedy," the whitest cow in the byre, and then and there I had to drink three cupfuls of the warm milk, three times a day.

Dr. Buchanan thinks "there never was any large factory of pottery on the island. Each little community had its own potter," and he goes on to state that "one hundred and twenty years ago, craggans were the only articles [dishes] in common use for culinary purposes; large ones were used as pots for boiling, others were used to keep milk, and others as milking pails; they were even used as churns."

In moralizing on this condition of things, Dr. Mitchell continues, "It is desirable at once to realize, with regard to these craggans, that there is nothing known in the way of pottery more rude. They are made of coarse clay containing sand and gravel; they are not baked in an oven, but in an open fire place; they are shaped without any aid from any sort of potters' wheel; they are unglazed; they are globular and without pediment; they are nearly always destitute of ornament and



such ornamentation as does occasionally occur on them is composed of straight lines made with a pointed stick, or the thumb nail, or a piece of cord. The rudest pottery ever discovered among the relics of the stone age is not ruder than this, and no savages now in the world are known to make pottery of a coarser character.

"It is surely something very startling to be able to say this of the staple manufacture of a Scottish village in the nineteenth century. Within the century in which we live its manufacture was common all over the Lewis, all over the Hebrides, indeed, and it was not unknown in the villages on the west side of the mainland. It was an art practised by people not inferior in mental capacity to the people of Scotland generally, by people who sent their sons into the centres of progress to occupy there as good a place as any, either as artists, seamen, merchants, or professional men.

"I conclude my notice of the Barvas pottery, formulating only three inferences, which seem fairly to flow from what has been observed :

"1. That the very rudest form of art may co-exist in a nation with the highest—the Wedgewoods of Etruria with the Macleods of Barvas.

"2. That it would be wrong and stupid to conclude from this that the nation must be composed partly of savages and partly of a highly cultured and civilized people.

"3. That persons capable of immediately receiving the very highest culture may practice an art just as it is practised by the most degraded savages of whom we have any knowledge."

In arriving at these conclusions, however, Dr. Mitchell fails to reach bottom facts—he fails to sound in the deepest water.

Archæology teaches us not only that the beginnings of all arts are of the simplest, but after these have reached the highest utilitarian stage appreciable by the people who practice them, progress ceases. Henceforward, forms become stereotyped, and in a short time one of the last things that occur to the mind is the idea of attempting to effect any improvement in what always *has been*. Coupled with this, also, is the almost inevitable growth of sentiment attributing to ancient forms something akin to the fetishtic. Dr. Mitchell touches ground along this line when he writes (p. 174) "Most persons know what I refer to when I speak of stone axes or celts, but it may not be so generally known that in every part of Scotland these ancient tools or weapons are now treated by the people as possessed of a power to keep away misfortune and cure disease. It is believed, for instance, that they assist the birth of children; that they increase the milk of cows; that they cure diseases of the eye: that they protect houses in which they are kept from lightning, and that they have many such marvellous virtues. Hence it happens that a stone celt is sometimes preserved in a house with reverential care, passing down through generations from father to son. By those who so preserve them they are called thunderbolts, and it is believed that, as they have a sort of supernatural origin, they may reasonably be supposed to have supernatural powers."

"How the stone celt came to be called a thunderbolt we can only guess. It would be nothing very remarkable, however, to find such a name given to it in some one part of Scotland, or even Scotland broadly, but it becomes very remarkable when we find it given not in Scotland only, nor even in Scotland, England and Ireland, but also in France, the

Channel Islands, Norway, Sweden, Germany, Holland, Portugal, Italy, Brazil, Japan, Java, Burmah, Assam, among the Malays, in Western Africa, and in many other countries." In the following supposititious soliloquy, we have most of what underlies the superstitions relating to the craggans. "It is old—it is very old. We have never seen any person who did not know what a craggan is. We have it frequently mentioned in our household tales—witches, kelpies and the 'little people' have always used dishes of this kind when any vessel was required—it was from a craggan, or by means of a craggan that so-and-so did so-and-so when so-and-so happened, it is therefore luckier to use a craggan than it is to use any new-fangled kind of dish. Besides this, we have always had craggans in the house—without a craggan the house would not look like itself. Granny Macleod says she likes to drink from a craggan better than out of a siller cup, and that a baby will thrive better if fed from one rather than from chinaware or any new-fangled kind of pottery. It is a more natural kind of dish\* and forby, we can make this dish ourselves, or buy it from our neighbor across the way, or, perhaps in the nearest clachan."

This kind of argument and belief is enough to establish the use of anything in a rural district, without any reflection on the general intelligence of the people.

The most interesting particulars are, perhaps, those connected with the making of the pots. The process throughout seems to be quite as simple as is imaginable, and, no doubt, follows very closely pre-historic methods. There is no specific mention of tempering the clay in any way, but as we are told that the material chosen contained sand, experience had evidently taught the potters that this was the best kind of clay, and that no additional tempering mixture was necessary.

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† \* It is said that not long ago a gentleman of the old school found fault with colored glass windows in a kirk, on the plea that he thought glass should be left "juist as the Almichty made it."

## FLINTS.

It is just as likely that freak shapes in "flints" are attributable quite as much to freakishness or even to accident on the part of the maker, as to any specialty of use for which the flints may have been intended. Fig 2 represents a shape not unique, but unusual, and which is perhaps merely an exaggeration of some less pronounced and common forms, or the result of an accident in chipping on one side, so that the maker, wishing to produce something symmetrical, imitated the defect on the opposite side.

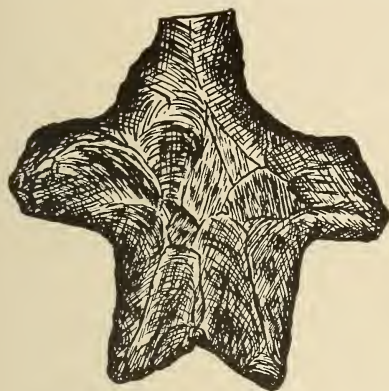


Fig. 2.

Another somewhat unusual shape is shown at figure 3.

It appears to be a secondary or degraded form, resulting from the re-shaping of what has been in all probability a much larger specimen. It was found on the same farm as that on which fig. 2 was picked up, and was presented by Mr. C. N. Mitchell, of Nissouri.



Fig. 3.

Also from Mr. C. N. Mitchell, of Nissouri, is the original of figure 4, belonging to a class we have agreed to call scrapers. Similar tools are still used by the Eskimo in cleaning the flesh side of skins, and no doubt for smoothing various objects of wood, as well as for other purposes, and if we may judge from the way these are mounted

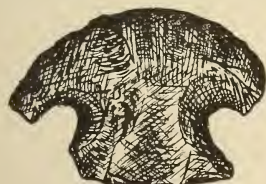


Fig. 4.

our Indian people attached them to short handles of wood, antler or bone, although it is safe to say that not infrequently such scrapers were grasped directly between the thumb and forefinger, just as our present-day carpenters use bits of glass.

The object illustrated here (figure 5, full size) has the form of a small axe, or celt, and is of Huronian slate.

The side not shown in the cut is considerably battered as if at some time, the stone had been used as a chipping block, or small stithy, but it is the side here illustrated that exhibits most features of interest.



The circle, square and triangle are, possibly the work of an Indian, but the repeated character  $\Delta$  was certainly produced subject to European influence, if not indeed made by some white man.

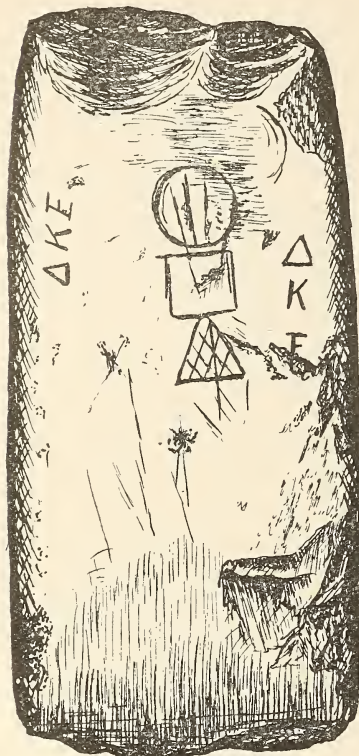


Fig. 5.  $2\frac{3}{4} \times 4$ .

The deltoid initial, in both cases, is peculiarly striking, and neither seems to have any connection with the chevroned triangle near the middle of the stone, and forming the lowest member of the suggestive combination, viz., circle, square and triangle. There are probably some people, the liveliness of whose imaginations will assist them in reading more or less Masonic meaning into the signs, and who is he that may be able to successfully contradict any such suggestion or contention?

The piece of stone is fully twice as thick as we usually find in perforated tablets or gorgets. A sectional

outline of it at the middle is shown at the side of the cut.

This unique specimen was found on the farm of Mr. Chas. N. Mitchell, of Lakeside. Mr. Mitchell has kindly presented it with other interesting material of a similar kind to the Museum.

A gentleman who saw a paragraph in one of our Toronto dailies with an illustration of this specimen, writes, "The signs have without doubt been made by some member of the Delta Kappa Epsilon fraternity, and have no connection with masonry. The College fraternity of which the signs given are the symbols, was organized in 1844, and was a small organization down to the '70's. There are at present two chapters in Canada—one in Montreal, and one in Toronto."

## SLATE.

## SLATE GORGETS.

Among the interesting specimens forming the small collection presented by Mr. C. N. Mitchell, is what may be called a pendant of Huronian slate, which is unique in more ways than one. In Ontario, we seldom find any object of this kind, otherwise than quite smooth, except a few, bearing notched edges. Among fully 300 slate tablets, gorgets or pendants in our cases there is only another one, the surface of which is decorated with any kind of lines, and in this instance they are all diagonally straight forming a simple criss-cross arrangement.

In figure 6 it will be seen that the incised lines are, in the main, intentionally straight, but that we have on the lower end of one side, a few curved lines which, looked at in various ways, suggest the form of

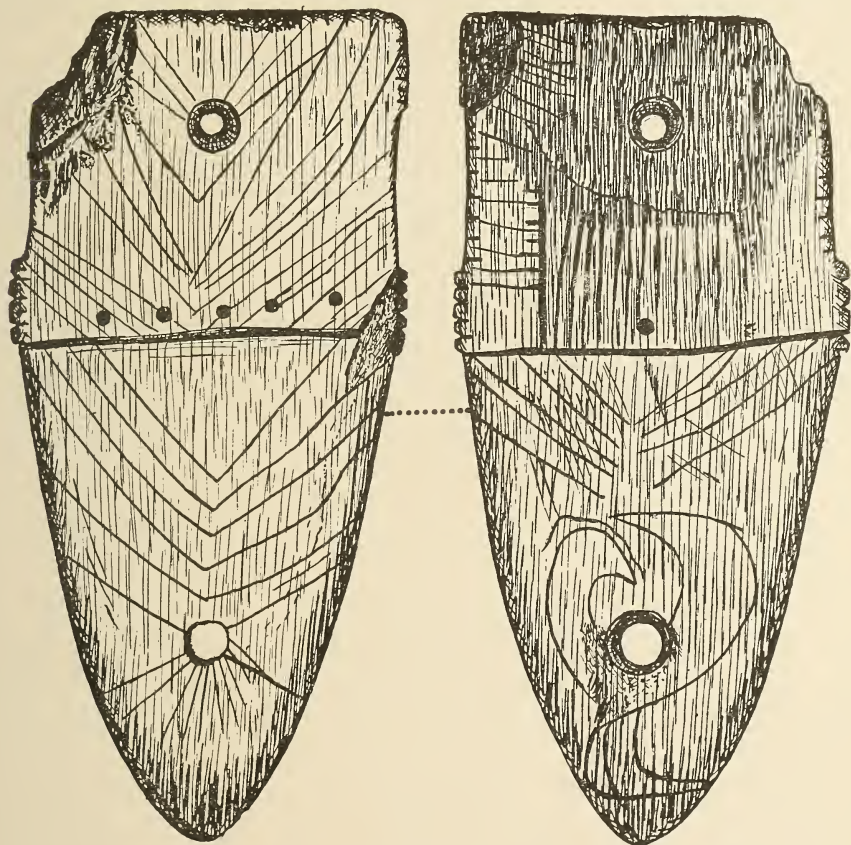


Fig. 6.  $4\frac{1}{2} \times 4\frac{1}{4}$ .

a bird. Only that one of the headlike drawings is turned the wrong way, the drawing might be regarded as a sort of triskelean design—something quite unheard of in this part of the world. The notches and

nicks on the corners of the upper third, where the edges are square, may have been meant as decorative, or they may have been tally-marks of some kind.

The five small spots on one side, and the one on the other indicate slight depressions made by the point of a drill.

Apart from the nature of the material, the only thing we can be sure about concerning this specimen is that it was carried by being suspended from the hole at the wide end. The inside edges of this hole are worn quite smooth. It may be noticed also that the hole was made by boring from each side, while the one near the pointed end has been almost entirely drilled from one side.

#### WOMAN'S KNIFE.

Fig. 7 shows all that is left of an Eskimo woman's knife from Herschel Island, and was presented to the Provincial Museum by Rev. C. E. Whittaker, Anglican Missionary at Fort McPherson, in Mackenzie

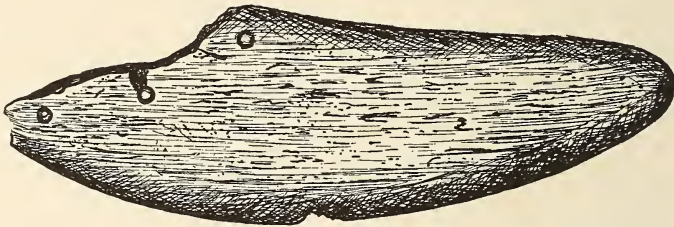


Fig. 7.— $\frac{1}{2}$  Dia.

Territory. The value of the specimen here illustrated consists mainly in the fact that it shows the method of effecting a repair, namely by boring holes along both of the fractured edges, and then binding the pieces together by means of a raw-hide or other thong. Many tools of this kind are provided with a strip of wood fitted neatly along the upper (straight or concave) edge as a handle—the blade being made thin to enter wedge-wise into a slit in the wood.

These so-called knives are, rather, scrapers, if, as is said, their use is to remove bits of flesh from the inside of pelts before the tanning process.

Our home Indians used implements of this kind, and as most of those in the Museum were found in the northern and eastern sections of the Province, it is allowable to hazard the guess that they had an Eskimo origin, more or less directly, for we have good reason to believe that the Innuits in their wanderings sometimes reached as far south as 45 degrees N. latitude.

#### SINKER.

The line-sinker of which we have a cut (fig. 8)—27,741 is from Herschel Island, and is the gift of the Rev. C. E. Whittaker. Of what

\* "Among other evidences of Eskimo influence and contact, we have the semi-lunar knives of slate, . . . which are very much like the Eskimo 'woman's knives.'" Mr. W. J. Wintemberg, p. 36, Ont. Arch. Rep., 1905.



is plainly a fish form, the material is what we recognize as Huronian slate, and it would be interesting to know whether such "rock" is found within the Arctic Circle, or even near to it although farther south, or that it was carried thither from the

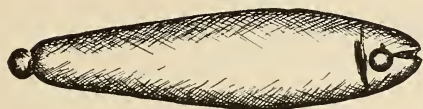


Fig. 8.— $\frac{1}{2}$  Dia.

country of the Great Lakes. In our Eskimo collection we have numerous slate specimens of women's knives—some of dark red, and others of a dingy blue color, but no other of the Huronian variety.

On the side of the cut, not shown, there is a somewhat deep, longitudinal groove from the hole in the head to near the tail, as if it were meant to form a bed for the fish-line.

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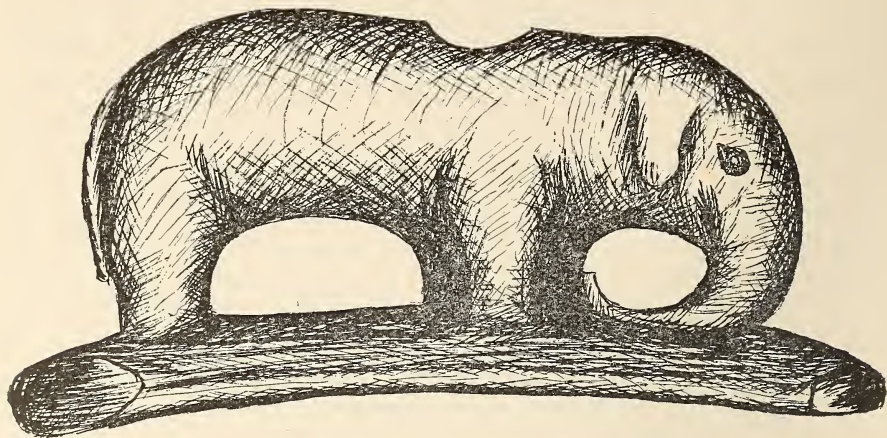


Fig. 9. Full Size.

## STONE PIPES.

## DAVENPORT ELEPHANT PIPE.

There are very few objects in any public collection which have been the cause of so much disputation as the "Elephant Pipe" in the Davenport Museum, Iowa. A cast of this pipe has been courteously supplied to the Provincial Museum by the Curator of the Davenport Academy of Sciences' Museum, through our friend Mr. J. H. Hume, and the illustration, fig. 9 (22,016), represents the object in question.

The original was found, or, it is said to have been found, a good many years ago in a mound near the city of Davenport, Iowa, by a Rev. Mr. Gass, who is reported to have discovered another pipe of a somewhat similar kind not long afterwards. It is certainly somewhat singular that the only two objects—pipes—of this pattern, were found by the same gentleman, but it is not so strange, as has been alleged, that both pipes should have come to light in the same locality, for the maker of one would be quite a likely man to produce more, supposing them to have been made contemporaneously.

As a matter of course the doubt respecting the authenticity of this pipe centres on the natural enough belief that the makers of such objects could not, or would not, attempt to produce any representation of an animal they had never seen, and the inference is that if the Davenport pipe is a genuine, pre-historic production, man and the mammoth must have been contemporaneous. It is not wholly improbable that man and the mammoth lived contemporaneously, but it is needless to repeat here even a tithe of the arguments that have been employed for and against the authenticity of the pipe. Some writers have openly charged Mr. Gass with having been the fabricator of the object as well as of the story of its find, while others who knew him intimately have just as plumply denied the likelihood of such deception on his part.

In this province, remains of the huge animal have not seldom been found at such shallow depths as to indicate comparatively recent exist-

ence. Skeletons more or less perfect are found not more than from three to six feet below the surface in swampy places. The tusk of one, attached to the skull, was for many years exposed on the surface and it was customary for the farm hands when passing it with their axes, to give it a cut, in the belief that it was some sort of half-petrified bit of timber.

Perhaps some bones found in this city were lying at the greatest depth yet reported in such cases. When the contractors were putting in a drain on Dupont Street, mammoth bones were found eleven feet, two inches below the level of the street. Only last summer when the foundation was being dug for an addition to a store on Yonge Street, leg bones of the animal were found twelve feet below the surface. In the latter case, the evidence did not point as it usually does, to the miring of the animal in what was, at one time, a swamp.

Up to the present time no piece of Indian workmanship has come to light in this province indicating any knowledge of the mammoth on the part of the old people, although some twelve or fourteen years ago it was reported that a former resident of Ontario had an "elephant pipe" but the story went on to say that he had removed to the Northwest, and his place of residence was unknown. No credence was placed in this story at the time, and nothing has occurred since to give it any.

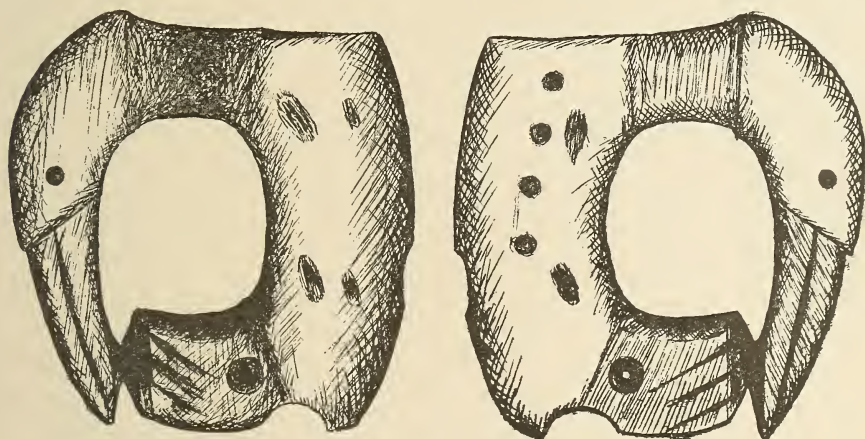


Fig. 10, 11.— $\frac{2}{3}$  Diameter.

Among the Indians, both Ojibwa and Iroquois, there exists a somewhat vague belief in a large animal that once ranged the forest, and so strong was it that it was able to crush trees that stood in its path.

In any event, it cannot but be interesting to the ethnological or the biological student to bear in mind that animals of the kind in question have "lived and moved" in Ontario, and, should opportunity offer, to examine very closely the immediate surroundings of the remains, in search of anything that may point to contemporary human presence.

Referring to the engraving figure 9 it will be noticed that the fore legs seem to be disproportionately large, but this was necessary to afford room for the bowl of the pipe. The stem hole connects with the bowl from the front end. There has been no attempt made to show tusks.



The slender proportions of fig. 9 are suggestive of an intention to represent a wading bird of some sort (heron, bittern, or rail), but it is difficult—indeed, impossible—to say which.

Much time and patience are frequently lost by the “wise” people in making guesses first, and strong statements afterwards, respecting the animals intended to be represented on what are often called effigy pipes. In some cases—as, for example, that of the owl—the semblance is fairly good; but in most instances it is very difficult to distinguish. The material itself in this case is a fine-grained sandstone. On the angle of the lower jaw, on the left side, some owner of the pipe has made what seems to be a tally, where nine slight notches indicate his count. The workmanship is much superior to that of fig. 12.<sup>a</sup>

This somewhat unusual form of pipe was presented to the museum by Mrs. James, of Port Perry, on Lake Scugog, which was no doubt a favorite aboriginal resort.

Fig. 12 is a simple, but somewhat unusual, form of smoking-pipe, and comes to us through Lieut. G. E. Laidlaw, from Abram Faulkner, who found it on his farm, French Settlement, in Bexley township, Victoria county. The intention of the maker was, apparently, to produce what would look like a man, wearing a head-dress representing the head of some beast—bear, wolf, dog or fox; but the attempt was a signal failure—perhaps from the limited quantity of material, but quite as likely on account of the workman's want of skill.



Fig. 12.  
Full size.

Like many of the pipes from the Balsam Lake District, this one is of dark-gray soapstone.

The bowl-hole is very small—scarcely an inch deep—very narrow at the bottom, and less than one-half inch in diameter at the top. With the exception of four short lines—two in front and one at each side near the lower end (perhaps to indicate arms and legs), there is nothing worth mentioning by way of decoration. At the base, and in front, a small hole has been bored, to meet another bored

upwards, thus providing a means of attachment to a stem, as well as for suspension from the belt, or other portion of dress, when not in use.

Rude as is the workmanship on the upper part of the bowl, the face, when viewed in profile, has a very marked Indian appearance.

Fig. 13 is instructive. It was found on the farm of Mr. J. J. Finney, near Burnt River, P.O., Somerville, Victoria County. The grave from which it was taken was said to contain the remains of three per-

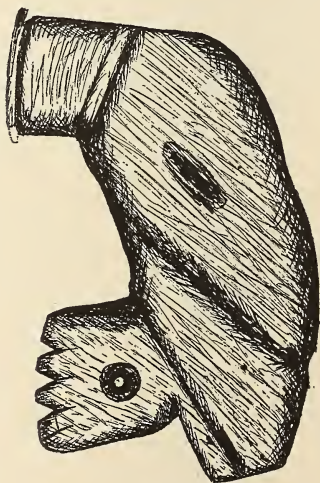


Fig. 13.

sons. The specimen comes to us per Col. G. E. Laidlaw, of "The Fort," Victoria Road.

It shows a somewhat ambitious attempt to make a bird-pipe, but the maker was not equal to the occasion. Even in its unfinished state, it is clear that the efforts to bring it into shape were in many respects those of a bungler; and it was, perhaps, because of such treatment that the head was broken off. The fractured end has been sawn off, either by the hand that made the pipe, or by some one else equally unmechanical

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## BONE AND HORN.

COMBS.

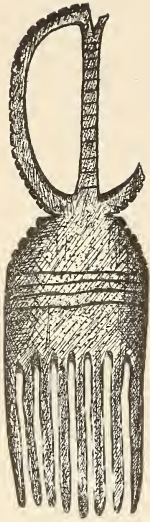


Fig. 14.  
 $\frac{1}{2}$  Diameter.

The comb here illustrated is the gift of the Rev. C. E. Whittaker, a missionary on Herschel Island, off the mouth of the Mackenzie River, Arctic Ocean.

In that region the Eskimo and Indians (Louchoux) are neighbors, so that it is only reasonable to look for action and reaction between the two peoples with respect to many of their manners and customs, and, perhaps, more especially, in the matter of handiwork, notwithstanding that, on the authority of Bishop Stringer as well as of the Rev. Mr. Whittaker, the peoples are not always on the best of terms.

It is sometimes doubtful whether marginal notches, on specimens of this kind, have been made for ornamental or for numeral purpose; but the regularity of the markings on figure 14 leaves no room for doubt that decoration was intended in this case.

There is not a single mark on the specimen in question to indicate the use of any metallic tool.

In the controversy about smoking pipes, the specimen here, figure 15, (25,503), would appear to lend some countenance to the notion, that the first pipes were straight. But the slight curve shown on this pipe, if it was a pipe, was simply the natural bend of the antler from which it is made. Although hollowed from end to end, there is no appearance of tool-work on the material, except that the tip has been cut off somewhat squarely, and that just beyond this there are some marks which may have been made by teeth pressure, or by some blunt instrument.

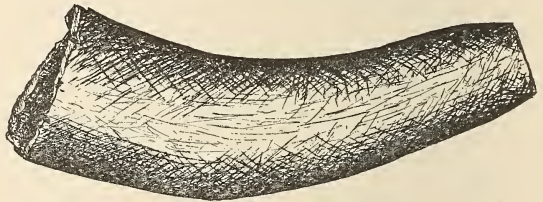


Fig. 15. (25,503) Full size.

Fig. 16 (27,099) entered in our catalogue as a "hide-scraper," was presented by Mr. E. R. Steinbrueck, of Mandan, Dak. It is of a type quite unknown in Canada, so far, but something of the kind may turn up here at any time. In all probability this shoulder-blade tool is made from the bone of a buffalo, but similar bones of the moose, and other large animals may have been used similarly. A tool of this size, seven inches long, might have been used as a spade, or as a hoe, and scratches on the surface of this specimen certainly indicate its employment in some other way than that of a "hide-scraper."



In the cultivation of maize, on light soil, an implement of this kind, with or without any kind of handle, might have been used effectively.



Fig. 16.

## SHELL.

## SHELL GORGET.

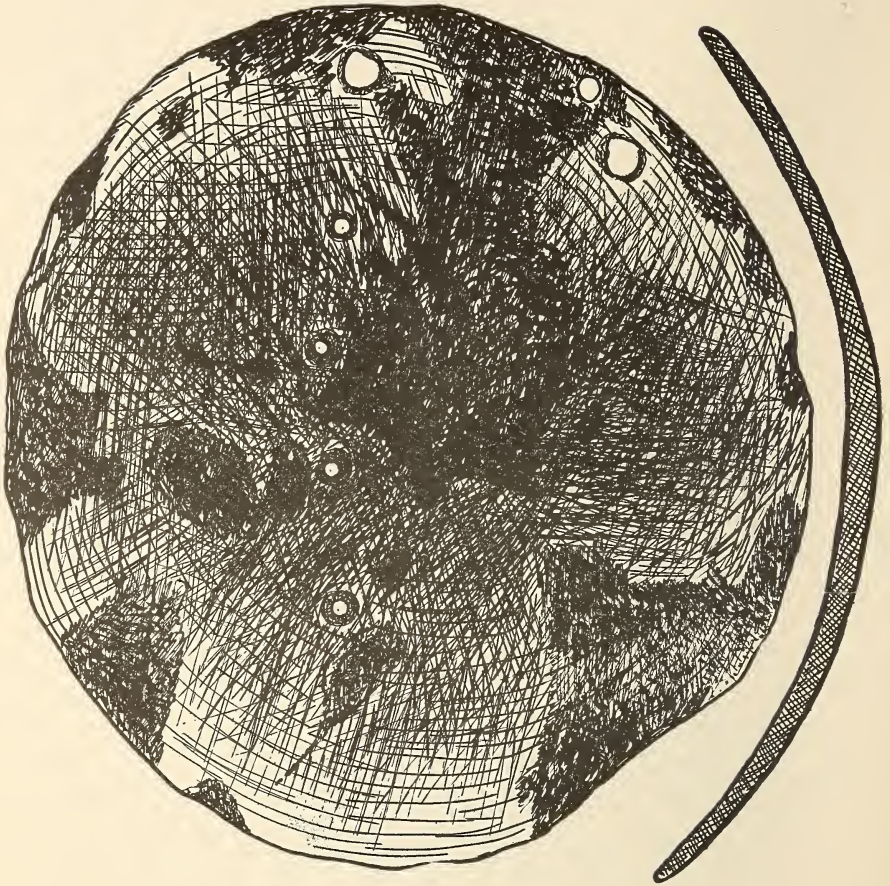


Fig. 17. Full size.

Fig. 17 (27,816) shows the appearance of the hollow side of what is called a "gorget," made from the outer coil or body-whorl of *busycon perversum* or other large shell. Up to the present time we have found only one or two shell specimens, the surfaces of which are marked by any incised-line pattern or design such as not infrequently appear in more southerly districts.

In 1899 we procured through Mr. J. S. Heath (p. 25, Ann. Arch. Rep. 1899), half of a shell gorget, on the convex side of which is engraved part of the conventionalized rattlesnake so often found on the concave sides of such objects, perhaps most notably so in Tennessee. The most deeply shaded portions in the illustration show where plainly enough, the gorget has come into contact with iron, and this will be easily under-



stood when it is mentioned that there were also found in the mound all that was left of a steel knife and a pair of scissors—European,



Fig. 18. (27,821.)



Fig. 19. (27,828.)

as a matter of course,—and a clear proof that mound-building was carried on until a comparatively recent date in Ontario,\* for the metallic relics were taken from the deepest part of the mound, and therefore the less likely to be regarded as “intrusive.”

### BEADS.

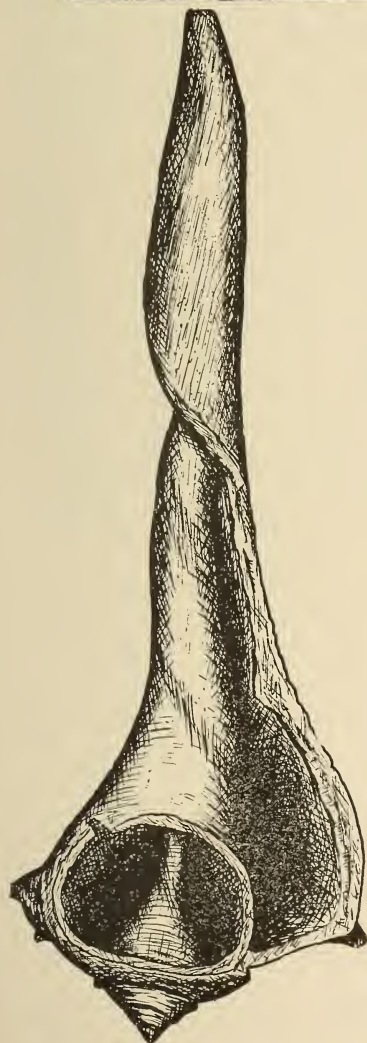


Fig. 20. Full size.

Beads of this kind when turned up by the plough are usually regarded as being of bone, sometimes as of “petrified bone,” and occasionally, as of “bone petrified into stone.” Appearances suggest bone, and there are many more bone beads found of this shape than there are of shell or of stone, and as comparatively few of us have ever seen shells large enough to supply material for such beads, it has come about that all beads of long, cylindrical shape are “bone beads.” Perhaps, too, the hole is suggestive of birds’ wing-bones, for the difficulty of boring such small holes naturally occurs to everybody. However, as the beads are made from the tubular, columella, or central pillar, or column, around which all the rest of a univalve grows spirally, the hole in the bead, is, therefore, not a work of mechanical art at all.

The shells used in work of this kind were not native to Ontario, or even to

\* See Ann. Arch. Rep. for 1905, p. 155.



Canada, but were procured from the Coast of Florida, probably in exchange for native copper, huronian slate, furs, or other material found in our own country.

The largest beads seem to have been made from the columellæ of the genera *Busycon* and *Strombus*, while those of smaller size, from half an inch in length were from *Fulgur carica*, and others of even smaller dimensions.

Fig. 21 is of the commoner runtee type of which we have a good many specimens from Flos township, Simcoe county, and from Brantford township, Brant county.

This specimen differs from the others in being considerably larger.

A few of these were found along with six skulls, and a few miscellaneous specimens as elsewhere referred to, in the Port Colborne Mound, last year.

Fig. 21 shows one of the more common kind, found at the same place—in it the hole is bored from end to end.

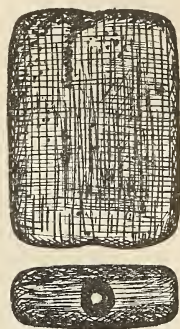


Fig. 21. Full size.

The shell beads represented by figs. 21 and 22 are of the kind sometimes called runtee, that is to say, the holes are bored not through them from side to side, but lengthwise, fig. 21, or, as in fig. 22 (27,824), half way through one side near an end to meet another short hole bored lengthwise *from* the middle of the end. It will be remembered that it is in this way holes are bored through the bases of what we call bar and "bird amulets." Shell-beads bored in this way are not by any means common, if we may judge from the fact that the specimen figured here is the only one that has come into our possession since the Ontario archæological collection was begun, twenty-one years ago.

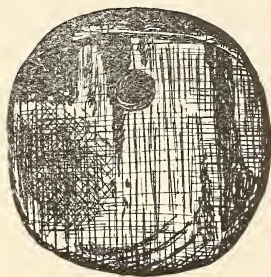


Fig. 22. Full size.

## PEMMICAN BAGS.

The prairie 'Indians' method of preparing animal food for preservation was as simple as it was ingenious. It was "jerked" or cut into strips, sun-dried, or slightly smoked, packed closely in sacks

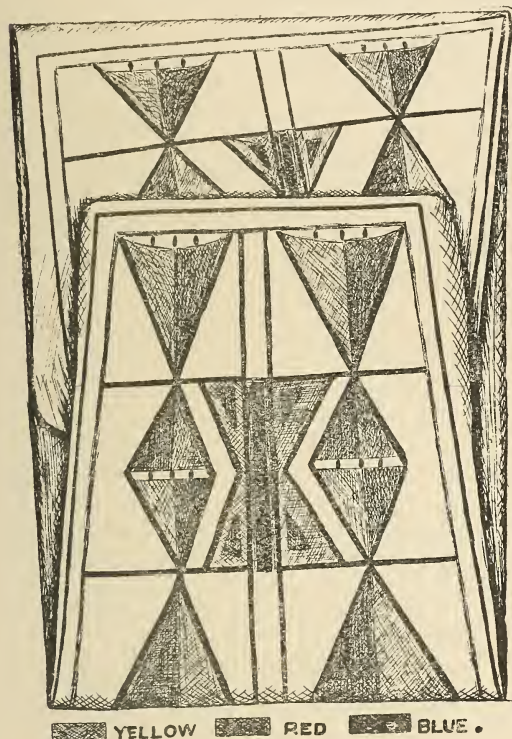


Fig. 23.

made of skins in the natural state, but with the hairy side out. Over the contents, and from time to time, as the packing proceeded, was poured the melted fat of the animal, and it is averred that prepared in this way the contents (the pemmican) would keep even for years! It is tolerably safe to say that no Indian ever made any test of this kind intentionally, whatever may have occurred in an accidental way to show that the food would remain fresh for so long a time, but, in any event, it is pleasing to find here that our aboriginal friends were not always so utterly improvident as the story-books would have us to believe. Indeed, had they been so, the race must have disappeared long before any white man stepped on this continent. Even allowing

that pemmican would keep fairly well for a few months, or even for a year, we have an illustration of the providential instinct—(if "instinct" be the right word,) and the practice of which must have been the means of avoiding much suffering and loss of life from starvation. Like some other aboriginal peoples, notably those of British Columbia, our old Prairie folk, in common with other Algonkin and Iroquois tribes, had an eye for the beautiful, and we accordingly find that they occasionally provided themselves with highly ornamental pemmican bags—perhaps in which to hold small quantities for immediate household use, thus avoiding the hanging or otherwise storing of an unsightly object in the tepee. This is scarcely in accordance with the popular notions respecting our Indians, but we have the fact staring us in the face that such cases or receptacles *were* made, and if not so made for the sake of appearance, it is not easy to assign any other reason.

It would be interesting to learn whether the design bears any relation to the purpose served by the bag, because most of the bags I have seen are ornamented much after the same pattern, *i. e.*, combinations of triangles in quadrangles.

Reference should also be made to the way in which the bags or cases are formed, and when it is said that they are made exactly as are our common letter envelopes, only that the folds are provided, near the edges, with holes, not shown in the cut, for lacing purposes, nothing more remains by way of description, unless it be to state that the hair has been removed from the skin, so that the material is now like heavy vellum.

The specimen figured was procured from Mr. H. A. Van Winckel, of Kingston, and comes from near Lethbridge, Alberta.

Another one, in the Provincial Museum, came from Mr. George C. Wright, of the same city. It was made by the Peigan Indians of Alberta.

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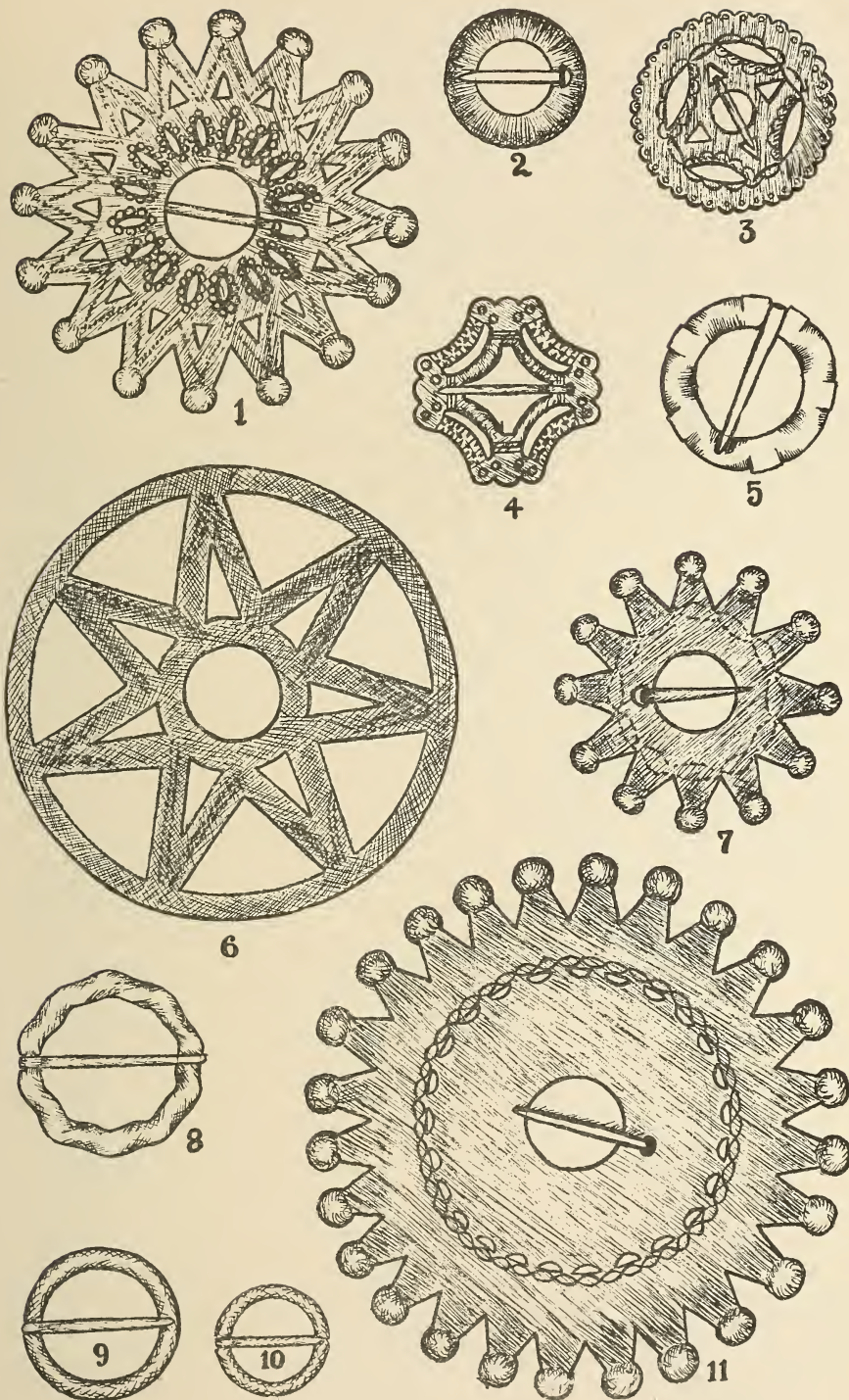
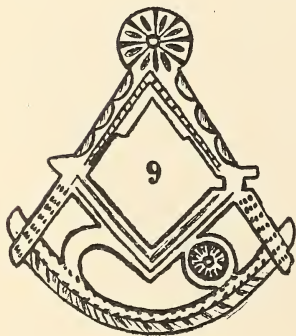
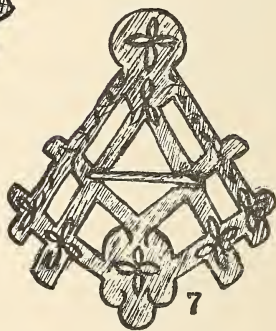
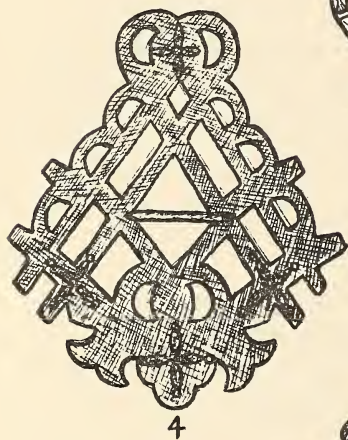
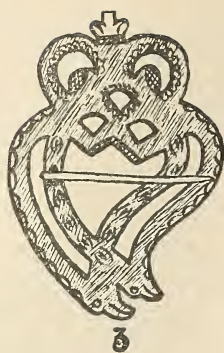
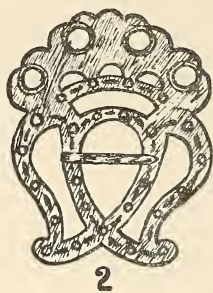
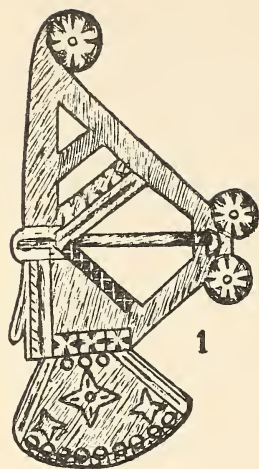


PLATE I





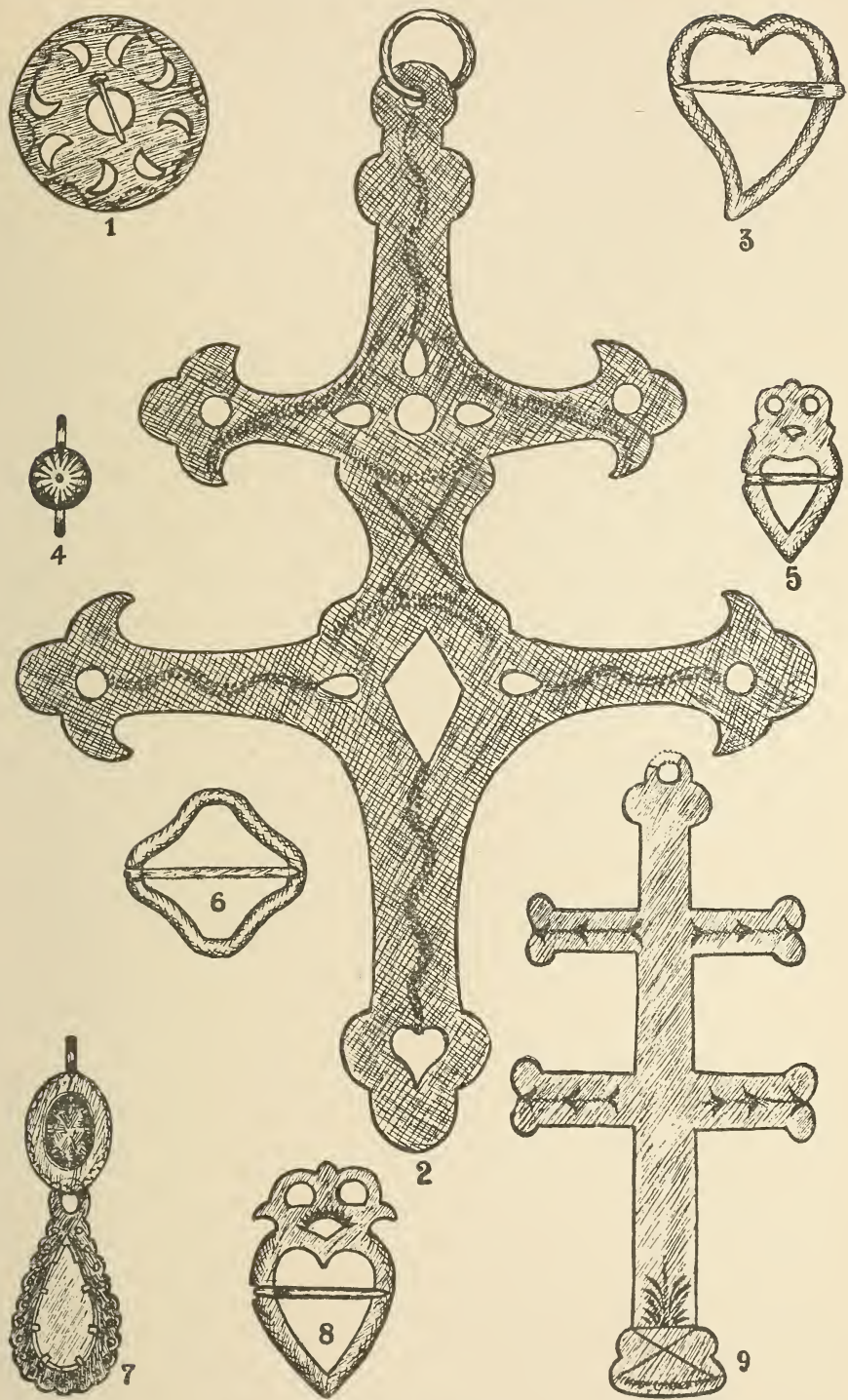


PLATE III



## EUROPEAN ORNAMENTS.

The European Jack Tar, who sails in ships visiting foreign and far-away ports, is strongly disposed to do a little trading on his own account. This is especially true when his voyages bring him into contact with peoples who are savage, or semi-savage, and who possess material of various kinds which he regards as curiosities, and which are again disposable when he arrives at home. It is to such sailors, probably quite as much as to regular traders and trading companies, that nic-nacks and gew-gaws find their way among simple-minded communities.

It is even said that in former days, when voyages of this kind were much more frequent than they are now, or can ever be again, that when Jack signed papers for his ship there was a special clause in the agreement permitting him to engage in petty traffic of this kind to a limited extent. In this way numerous trinkets were easily and speedily introduced among the natives of any country to whom glass and metallic articles were novelties, and thus it seems credible that many objects of European make might become widely spread throughout any country, passing from hand to hand by way of barter among the natives long before any attempt was made at settlement by the new arrivals, or even long before the natives of places remote from a port of call had ever seen a white man. It is not, therefore, safe to conclude that there was always actual or personal European contact with our own aborigines, simply because we meet with evidences of European presence somewhere on the continent, perhaps a thousand miles distant from any coast. But whatever may have been done by means of individual effort, the regularly chartered trading companies accomplished infinitely more in this way. For a few barrels of glass beads, of fish hooks, of pocket knives, of brass buttons, earrings and the like, costing tens or even hundreds of dollars, the returns in furs would amount to as many thousands, or hundreds of thousands, and as the Indian travelled immense distances to reach trading-posts we may readily understand why the white man's workmanship must have frequently long preceded the white man himself.

On the authority of Miss Tah ne-mah-ge-wah-nok (Going down stream) a highly intelligent Ojibwa, the statement is here made that Indians as a matter of taste prefer silver to gold. This statement was volunteered one day not long ago when the lady was examining a case of silver trade-ornaments in the museum. These have been collected, mostly through purchase, from a few Iroquois and others. The objects in question almost invariably take the forms of brooches, bracelets, finger and earrings, crosses, hatbands and a few medals. The brooches, bracelets, and hatbands were mostly made from metal in thin sheet form, and quite springy as a result of having been rolled cold in the manufacture. All the patterns on these articles are the result not of casting, but of cutting and embossing, as the nature of the material demanded, and in this way they were produced very cheaply. As a matter of course the medals were made by means of dies and these decorations were given by the government and presented or sold by wealthy trading companies to distinguished Indians, or to others whose favor it was desirable to win for commercial purposes.

So far as our collection is concerned, brooches are, by all odds, most numerous, and nearly all these correspond very closely with similar objects found in the State of New York. My friend, the Rev. Dr. W. M. Beauchamp, of Syracuse, has devoted a great deal of attention to this matter, as he has to so many others connected with the early occupants of the soil, and under the auspices or patronage of the University of the State of New York, has issued several bulletins on archæology. In one of these (Archæology 8) "Metallic ornaments of the New York Indians," he refers to upwards of four hundred articles of this kind, including those of brass and copper as well as of silver, all of which he has either examined personally or had accounts of from others who own the articles.

It does not appear necessary to refer individually to each of the illustrations, many of which are but types of what our case contains. It may suffice to refer to these silver specimens as they appear, in groups.

Plate I shows eleven drawings of the most common kinds of brooches. In figures 1, 7 and 11, the rounded extremities of the radiations are embossed showing slightly raised eminences on the upper side—the side which is shown in every case on this as well as on Plates II and III. Figures 2, 9 and 10 are of the plainest pattern, the only attempt at ornamentation consisting in the metal being convex in cross section on the upper side, and correspondingly concave on the lower one, a device which was adopted perhaps rather to stiffen the metal than to ornament it, although the curve served both purposes.

Figure 11, Plate I, is one of the largest of its kind (3 inches in diameter) reported to have been found in America. Dr. Beauchamp pictures one (fig 10, plate 2, N. Y. State Museum Bulletin 73) which is about the same size, and regarding which he says. "It is the largest he [the finder] has obtained or seen." The New York specimen has only twelve rays, while ours has twenty-four.

Plate II represents brooches, four of which, (figures 1, 4, 7 and 9) bear Masonic devices—the square and compasses. The appearance of this pattern leads naturally enough to the conclusion that many Indians belonged to the Masonic fraternity, but the supposition is not a correct one, notwithstanding the fact that the "ancient mysteries" are said to be well calculated to prove attractive to savages in general, but the truth seems to be that trinkets of this and other kinds were passed from hand to hand indiscriminately.

In taking up this subject on page 91 of the Bulletin of the N. Y. State Museum, Dr. Beauchamp says, "Out of a large number of these masonic brooches, over a score have been selected for illustration, in themselves far more in number than all of the [Indian] Free Masons known. Joseph Brant was a well known member of the fraternity and Red Jacket has been claimed. There were a few others, but these were common ornaments." He proceeds to state in respect to the large number that have been found, "This abundance is proof that they had no [Masonic] significance to most of their wearers."

This was no doubt true also regarding many of the crosses. They were worn merely as ornaments in a large number of cases simply because they were white and shiny.

As will be seen from Plates II and III, the conventional representation of a heart was a favorite emblem among the Indians, who regard the

heart as the seat of courage just as common language indicates our own belief to be. When the heart symbol was employed for brooches it was seldom used singly (fig. 3, Plate III) but either in combination with a crown, or, in duplicate, surmounted by some sort of coronal decoration.

Ear-rings and finger-rings of silver do not occur frequently in Ontario. Fig. 7, Plate III is one of a pair of the former from the Six Nation Reserve, Tuscarora. The middle of the upper part is of red glass and of the lower part, green glass.

With respect to the crosses, one would suppose them to have been looked upon with something akin to religious awe, or fervor, or, at the very least, as keepsakes, but this does not appear to have been the case, if we accept the belief that they passed from hand to hand quite as freely as did brooches, rings and other silver articles. However, this may have been in a general way there can scarcely be a doubt that at least some of the recipients of such objects did regard them with special favor.

Besides the two patterns shown on Plate III we have a few others, but most of them quite small, and several of them made of brass.

Figure 2, plate III, represents one of two large specimens purchased at a country store (Six Nations) on the Tuscarora Reserve, Brant County.

When Cardinal Merry Del Val was in Toronto, opportunity was taken of his visit to the Museum, to discover if possible the origin of double-barred crosses in Canada, and their meaning in a general way. His Eminence stated that they were "archiepiscopal, pectoral, processional crosses," and he could only wonder that such articles should have been found in comparatively common use among the Indians. If we could summon the spirit of some old French fur-trader, an answer might be forthcoming.

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## ROCK PAINTINGS AT TEMAGAMI DISTRICT

BY W. H. C. PHILLIPS.

On information received from Wm. Brodie of Unionville, of drawings or markings that he had seen in the Temagami District Mr. W. H. C. Phillips, a temporary Assistant, was sent in June by the Department to procure photographs or drawings of them. The following is his account:

"At Latchford we procured the services of Steve Ryder, the Indian guide, who had first observed the pictographs, and we proceeded to Temagami Station by train, thence to the Hudson Bay Company's post at Bear Island, Temagami Lake, by steamer, and continued our trip by canoe for about eighty miles, including return.

The first series of paintings or drawings was found on the west side of the north arm of Diamond or Non-wa-kaming Lake, a short distance south of Lady Evelyn Falls, or about thirty-two miles from Temagami Station, on the T. & N. O. Ry.

The second series was on the west side of the south arm of Lady Evelyn Lake, just north of Lady Evelyn Falls, or about two miles from the first series.

In both cases the paintings were on the bluff shore about six feet above the water and at these points the channel is very narrow.

The formation is of limestone and apparently pieces of the rock have been broken off to give a better surface and also to protect the markings somewhat from the weather as in a number of places where pieces of rocks were broken off it left an overhanging projection.

The work was done in a dull red color and had a faded and washed-out appearance and in a few places was partly overgrown with moss. A camera and special plates had been taken along for the purpose of taking photographs, but on account of the lack of contrast between the natural and artificial colors and the impossibility of getting a sufficient exposure of the photographic plates owing to the constant rise and fall of the canoe on the waves none of the numerous plates exposed showed any traces of the drawings or paintings. It was thought better to have measurement and drawings made as it was feared the camera would not prove a success, and this was done under difficulties as the mosquitoes and black flies were very numerous and persistent.

The markings or paintings were from one-half inch to an inch in width, and although in some places the color was faint, still, for the greater part they were easily discernible at a distance of ten or fifteen feet. The series appeared to be composed of groups of markings and the drawings that were made and are here produced will show the arrangement of them. Each series did not cover a space of over thirty feet in length by about two feet in irregular width and at a reasonable height to do the work if a person was standing on the ice or in a canoe."

A comparison of the drawings made by Mr. Phillips in the Temagami country with those made by myself on Lake Massanog or Massanoga, as it is sometimes called, (pp. 48-9 in the Ontario Archæological Report, for 1893-4) cannot but convince us that the work in both parts of the country was done by the same people.

It would be utterly vain to look for any interpretation. All we can say is that "this looks like" one thing and "that looks like" another, but any attempt to form a connected story in the sense intended by the man who did the work would be only a useless effort. Even the Indians of to-day are unable to give the least hint with respect to the meaning of anything in such pictographs.

It should be mentioned here that these paintings extended along the face of the rock in one irregular line, so that they should, in our engravings, be regarded as two sentences of print or of writing, and read from left to right, one line following the other. This, however, may not be the order in which the story should read. The first series ends with the group of upright lines near the top of Plate VI.

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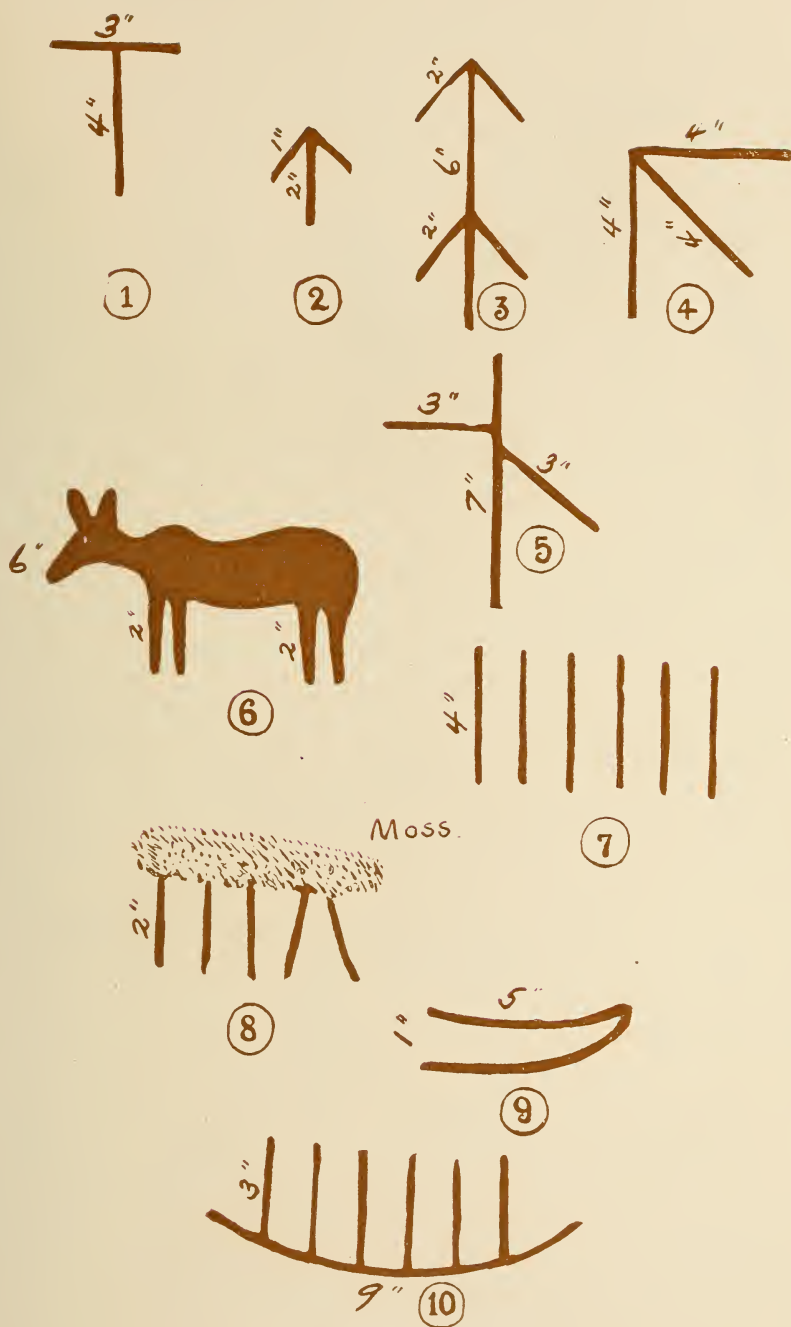


PLATE IV.



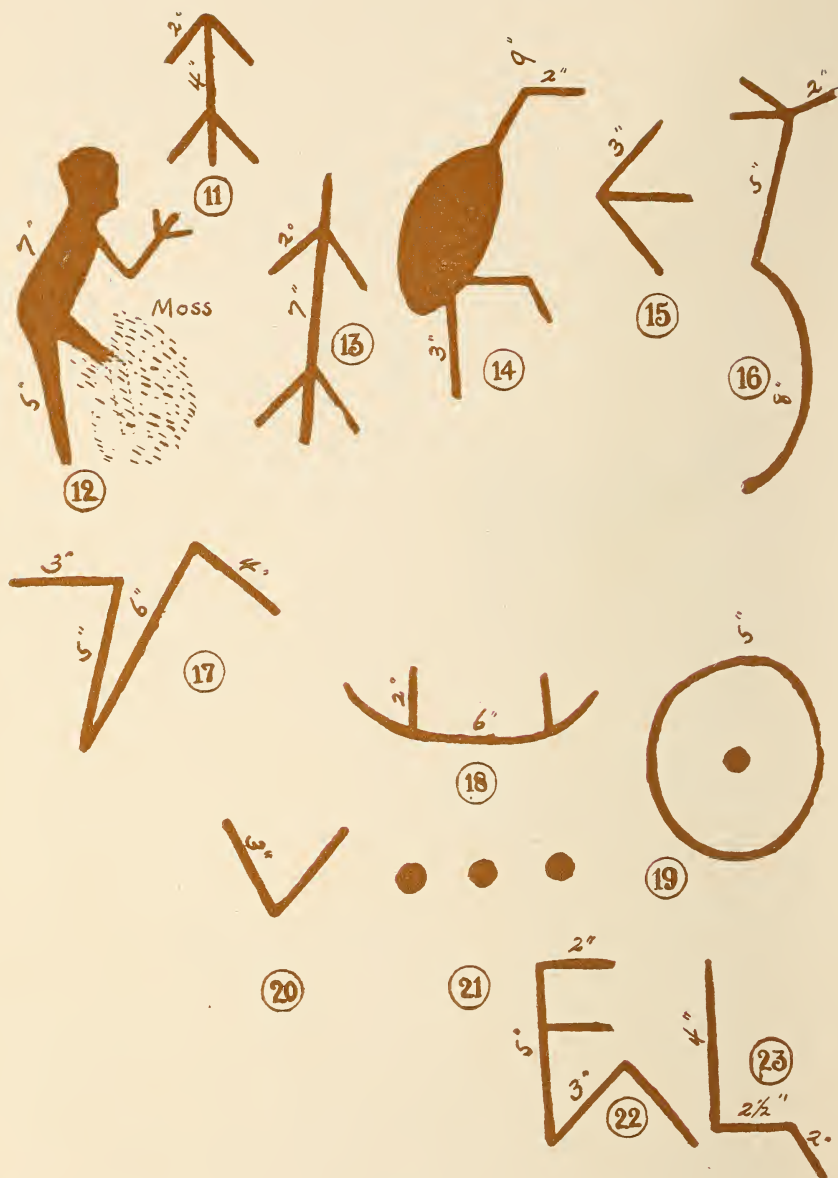


PLATE V.



PLATE VI.



PLATE VII.



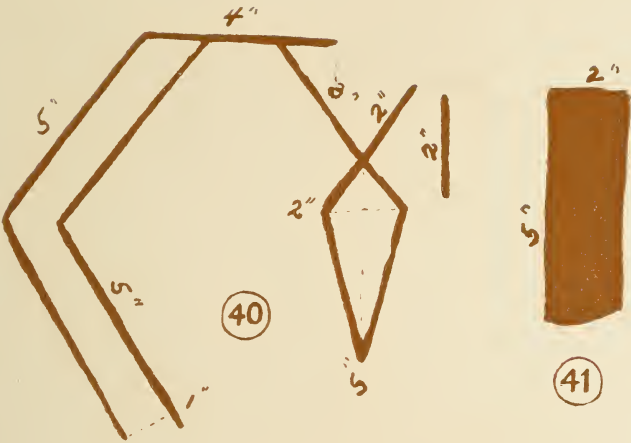


PLATE VIII.

## A PRIMITIVE LOOM.

It is inevitable that man should develop along lines corresponding to a large extent with the resources of his country. Polar man employs skins for his clothing—tropical and sub-tropical man, requiring but little,

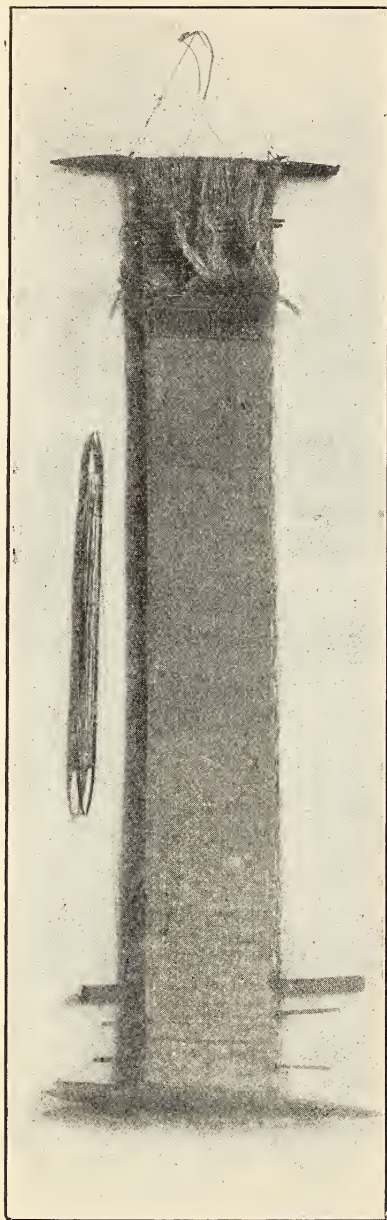
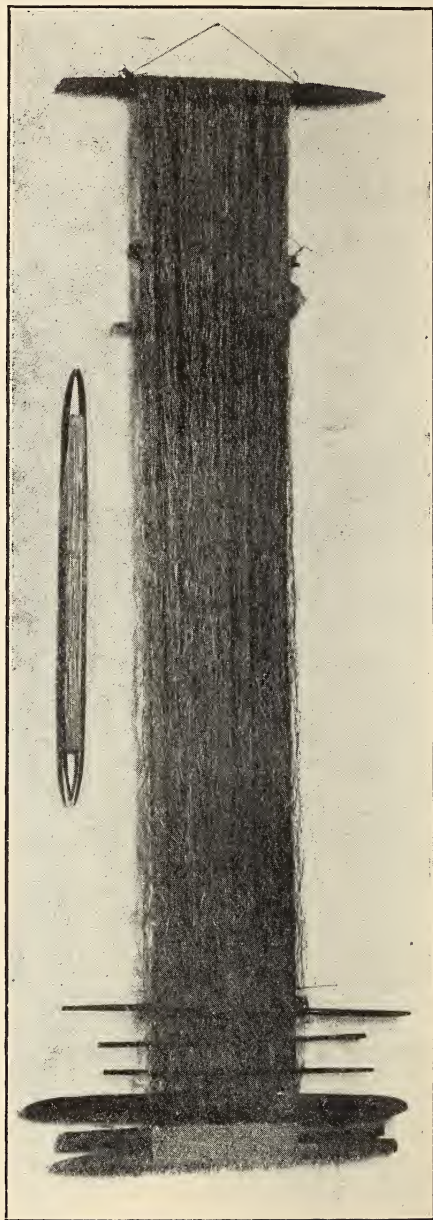


FIG. 24.

FIG. 25.  
(Opposite side of Web.)

takes something lighter—something airier, when he uses garments of any kind at all. To provide the latter he may adopt purely natural products, but in course of time, he is led by various causes to furnish himself with something more lasting, more convenient, and more showy, hence—weaving. Should he have any knowledge of basketry, his way is comparatively easy, by simply substituting more pliable material in the latter case; but, in event, he reaches the loom before a great while, and it is not infrequently a matter of no little wonderment to us that he is able in his simple way to produce cloth of one kind or other, not only of excellent quality, but of great beauty in pattern and color.

In the Provincial Museum we have an Ojibwa loom and coarse rush mat, the latter in an unfinished condition—but far enough advanced to show an agreeable design in broad bands of red and blue, and worked to contain stripes with a strong resemblance to what we call the Greek fret.

In graves we sometimes find fragmentary portions of coarse cloth, evidently of native make, but nearly always in a semi-carbonized condition, so that it is impossible to decide whether any dyeing had been done.

The mere mention of Navajo blankets is sufficient to remind us of the excellent workmanship these illustrate, not only in texture, but in design and color.

The little web of what is commonly known as grass cloth, a picture of which is shown at figure 24, was presented to the Provincial Museum only a few days ago by the Rev. Dr. Joseph Annand, who brought it from the Santa Cruz Islands, a small group in the South Pacific, about a thousand miles east of the New Hebrides, where Dr. Annand has been long established as a Presbyterian Missionary. Dr. Annand states that loom work is quite unusual among the island people, and that he knows of no other example outside of the Philippines.

The fabric is said to be made from the fibre of Pandanus leaf, or from that of a screw-pine. In any event, and simple as is the construction of the loom, the web shows a fine quality of workmanship. The neat little pattern worked in black near the upper fringed end is not very clearly seen, although is woven, or with fibre of a deep glossy black. This fine textile is 59 inches long and  $7\frac{1}{2}$  inches wide.

The shuttle is shown at one side.

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## CONTENTS.

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	PAGE
Archæological Map of Ontario.....	Frontispiece
Additions to the Museum.....	5
Pottery .....	15
Flints.....	19
Slate.....	21
Stone Pipes.....	24
Bone and Horn .....	28
Shell .....	30
Pemmican Bags.....	33
European Ornaments.....	38
Rock Paintings.....	41
Primitive Loom .....	48

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ERRATUM :—Fig. 5 with descriptive matter should be under the head of SLATE.

ANNUAL

Archæological Report,

1907.

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BEING PART OF

Appendix to the  
Report of the Minister of Education,  
Ontario.

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## PRESENTATION.

TO THE HONOURABLE R. A. PYNE, M.D., M.P.P.,  
*Minister of Education for Ontario.*

SIR,

I have much pleasure in presenting you with the Archæological Report for 1907. The delay has been wholly on account of the press of office work, but hereafter it will be necessary to begin the preparation of the statements much earlier than usual.

The total number of specimens at the close of 1907 in this section of the museum was 27,991—it is now 28,717. The increase of 1907 over 1906 was 588.

I have the honour to be,

Yours respectfully,

DAVID BOYLE.

# TABLE OF CONTENTS.

	Page
Presentation .....	3
Additions to Museum .....	5
Review.....	12
Pottery.....	20
Catlinite.....	21
Catlinite Pipes.....	27
Spindle Whorls.....	28
Stone Cist.....	29
Rock Paintings .....	31
Copper.....	35
Stone Club.....	36
Williamsburg.....	37
Use of Shells by Ont. Indians (W. J. Wintenburg).....	38
Cups.....	40
Spoons .....	41
Knives .....	42
Razors and Tweezers.....	43
In Pottery Making.....	43
In Tanning.....	45
As Scrapers in Wood Working.....	45
Ffsh-hooks .....	45
Shell Trumpets .....	61
Ornaments.....	62
Beads.....	64
Pendants.....	70
Gorget.....	72
Pins.....	76
Other Ornaments.....	77
Wampum.....	78
Shells in Aboriginal Commerce.....	80
The Killing of Wa-sak-apee-quay by Pe-se-quan and others.....	91

## PLATES.

	Page
Catlinite Pipes.....	Plates I., II. and III. 24, 25, 26
Rock Paintings (L. Nipigon).....	" IV. and V. 32 and 33
Rock Paintings, Africa.....	34
Shell Cup and Trumpet.....	Plate VI. 46
Shell Polisher and Scrapers.....	" VII. 47
Shell Implement and Beads.....	" VIII. 48
Shell Beads.....	" IX. 49
Pendants .....	" X. 50
Pendant and Gorget.....	" XI. 51
Shell Ornament.....	" XII. 52
Busycon Shell.....	" XIII. 53
Shell Gorgets .....	" XIV. to XVI. 54-56
Shell Objects.....	" XVII. 57
Necklaces.....	" XVIII. 58
Shell Ornaments.....	" XIX. 59
Wampum Strings.....	" XX. 60

## ADDITIONS TO THE MUSEUM.

1907.

- 27,991 Incised stone resembling a small axe. It bears marks like Masonic emblems and is probably modern. Lot 25, Con. 12, East Nissouri tp., C. N. Mitchell.
- 27,992 Arrow head, near Lakeside, Ont., C. N. Mitchell.
- 27,993 Chert knife or scraper, near Lakeside, Ont., C. N. Mitchell.
- 27,994 Spear or knife, near Lakeside, Ont., C. N. Mitchell.
- 27,995 Arrow or spear, Near Lakeside, Ont., C. N. Mitchell.
- 27,996 Spear head, weathered, near Lakeside, Ont., C. N. Mitchell.
- 27,997 Awl or perforator, near Lakeside, Ont., C. N. Mitchell.
- 27,998 Scraper, near Lakeside, Ont., C. N. Mitchell.
- 27,999 Stem of clay pipe, near Lakeside, Ont., C. N. Mitchell.
- 28,000 Chert reject, near Lakeside, Ont., C. N. Mitchell.
- 28,001 Fragment of ground axe, near Lakeside, Ont., C. N. Mitchell.

The following (from 28,002 to 28,176) were procured from G. C. Wright, Kingston.

- 28,002 Arrow head, Mo. State, U.S.A.
- 28,003 Arrow head, Mo. State., U.S.A.
- 28,004 Arrow head, Middlesex co., Ont.
- 28,005 Arrow head, Middlesex co., Ont.
- 28,006-11 Arrow head, Mo. State, U.S.A.
- 28,012-32 Arrow head, Middlesex co., Ont.
- 28,033-79 Arrow head Mo. State, U.S.A.
- 28,080-82 Arrow head, Middlesex co., Ont.
- 28,083-133 Arrow head, Mo. State, U.S.A.
- 28,134 Stone pipe, Wolfe Island, Ont.
- 28,135 Stone pipe, Strain's Farm, Amherst Island, Ont.
- 28,136 Clay pipe, Wolfe Island, Ont.
- 28,137 Clay pipe, Wolfe Island, Ont.
- 28,138 Stone pipe, Mo. State, U.S.A.
- 28,139 Clay pipe, Mo. State, U.S.A.
- 28,140 Clay pipe, Mo. State, U.S.A.
- 28,141 Catlinite pipe, Peigan res., N.W.T.
- 28,142-44 Catlinite pipe, Blood res., N.W.T.
- 28,145 Stone pipe, Blood res., N.W.T.
- 28,146 Catlinite pipe (squaw pipe), Peigan res., N.W.T.
- 28,147 Stone war club, Blood res., N.W.T.
- 28,148 Native copper pendants and beads (taken from skeleton seven feet long?), Pittsburg tp., Ont.
- 28,149-158 Stone adze, Middlesex co., Ont.
- 28,159 Gouge, Wolfe Island, Ont.
- 28,160 Gouge, Kerr farm, Amherst Island, Ont.
- 28,161 Fragments of pottery, Middlesex co., Ont.
- 28,162 Stone hammer, Middlesex co., Ont.



- 28,163 Stone tomahawk, Mo. State, U.S.A.
- 28,164 Stone war club, Blood res., N.W.T.
- 28,165 Woman's knife (slate), Wolfe Island, Ont.
- 28,166 Elk horn hide scraper, Blood res, N.W.T.
- 28,167 Squaw saddle, Blood res., N.W.T.
- 28,168 Pemmican bag, Peigan res., N.W.T.
- 28,169 Squaw scabbard (beaded), Blood res., N.W.T.
- 28,170 Skull, Chief Mountain, Alta.
- 28,171 Thigh bone, Chief Mountain, Alta.
- 28,172 Thigh bone, Chief Mountain, Alta.
- 28,173 Bead Pouch, Peigan res., N.W.T.
- 28,174 Short stone axe for inserting in handle, Middlesex co., Ont.
- 28,175 Stone adze, Middlesex co., Ont.
- 28,176 Native copper bracelets (26), Pittsburg tp., Ont.

The following (from 28,177 to 28,195) gift of S. Dillon Mills. \*

- 28,177 Red clay bowl, Costa Rica, C.A.
- 28,178 Red clay handled jug, Costa Rica, C.A.
- 28,179 Red clay vessel, Costa Rica, C.A.
- 28,180 Small red clay olla, Costa Rica, C.A.
- 28,181-87 Small red clay vessel, Costa Rica, C.A.
- 28,188 Small engraved cup gourd.       “
- 28,189 Cup made from kelp bladder.       “
- 28,190 Small engraved cup, gourd.       “
- 28,191 Small engraved cup, gourd.       “
- 28,192 Small metate (upper and lower stones), Costa Rica, C.A.
- 28,193 Small bag (sisal fibre).       “
- 28,195 Fragments of pottery, river shells and small bones from mound  
on road from Coboconk to Norland, Ont.

The following collection was procured from Rev. Dr. R. W. Large,  
British Columbia : (28,196 to 28,256).

- 28,196 Cedar bark mat, near Bella Bella.
- 28,197 Cedar bark mat,       “       “
- 28,198 Cedar bark mat,       “       “
- 28,199 Totem pole,       “       “
- 28,200 Old time spear,       “       “
- 28,201 Cedar bark basket,       “       “
- 28,202 Cedar bark basket,       “       “
- 28,203 Basket (birch bark),       “       “
- 28,204 Head dress (cedar bark), near Bella Bella.
- 28,205 Ceremonial wand,       “       “
- 28,206 Stone hammer,       “       “
- 28,207 Halibut sinker,       “       “
- 28,208 Halibut sinker,       “       “
- 28,209 Old time halibut hook,       “       “
- 28,210 Old time halibut hook,       “       “
- 28,211 Halibut hook,       “       “
- 28,212 Cod hook,       “       “
- 28,213 Cod hook,       “       “
- 28,214 Iron hook,       “       “

- 28,215-20 Dance whistles, near Bella Bella.  
 28,221 Dance whistle, " "  
 28,222 Dance clapper, " "  
 28,223 Dance Clapper, " "  
 28,224 Canoe awl, " "  
 28,225-29 Gambling stones, " "  
 28,230 Gambling disc, " "  
 28,231 Gambling disc, " "  
 28,232 Gambling disc, " "  
 28,233 Crow ornament (slate), " "  
 28,234 Seal ornament (stone), " "  
 28,235 Fragment of stone hunting knife, near Bella Bella.  
 28,236-44 Stone axe or chisel, " "  
 28,245 Paint stone, " "  
 28,246 Mat beater (bone of whale), " "  
 28,247 Gambling disc, near Bella Bella.  
 28,248 Bone chisel, " "  
 28,249 Small pipe, " "  
 28,250-54 Sea lion teeth, " "  
 28,255 Wolf's or dog's left under jaw, showing united fracture.  
 28,256 Eagle's head (carved in baryte, heavy spar).  
 28,257 Wooden club, Mrs. Alfred Willson.  
 28,258 Stone head war club, Mrs. Alfred Willson.  
 28,260 Buckskin tobacco pouch, ornamented with beadwork and porcupine quills, Mrs. Alfred Wilson.  
 28,261 Child's plaything, attached to the cradle, Ojibway indians, Edmund Morris.  
 28,262 Woman's slate knife, lot 1, con. 2, Toronto tp., Alfred Adamson.  
 28,263 Chert knife, lot 1, con. 2, Toronto tp., Alfred Adamson.  
 28,264 Stone axe, lot 1, con. 2, Toronto tp., Alfred Adamson.  
 28,265 Stone axe, semi-gouge, lot 1, con. 2, Toronto tp., Alfred Adamson.  
 28,266 Bead necklace, Blood Indians, N.W.T., Thomas Green, Ed. Dept  
 28,267 Glass and shell beads, Lambton Golf Links, Mr. Wallace.  
 28,268 Stone hammer, collected by H. W. Brown, Warner, Brown & Co., S. Dakota, gift of J. W. Wintenburg.  
 28,269 Charred Indian-corn, found in a mound in the London district, over which pine trees of a large size had grown and decayed.

Numbers 28,270-28,286 presented by C. N. Mitchell.

- 28,270 Piece of pottery, lot 25, con. 12, East Nissouri tp.  
 28,271 Two pieces of pottery, lot 25, con. 12, East Nissouri tp.  
 28,272 Spear heads, lot 25, con. 12, East Nissouri tp.  
 28,273-77 Arrow head, lot 25, con. 12, East Nissouri tp.  
 28,278 Scraper, lot 25, con. 12, East Nissouri tp.  
 28,279 Scraper, lot 25, con. 12, East Nissouri tp.  
 28,280 Awl or perforator, lot 25, con. 12, East Nissouri tp.  
 28,281 Awl or perforator, lot 25, con. 12, East Nissouri tp.  
 28,282-6 Flints, lot 25, con. 12, East Nissouri tp.

Numbers 28,287-28,291 presented by Mr. Moody.

- 28,287 Small axe, weathered, lot 35, con. 2, Trafalgar tp.
- 28,288 Spear head (gneiss), lot 35, con. 2, Trafalgar tp.
- 28,289 Arrow head, lot 35, con. 2, Trafalgar tp.
- 28,290 Arrow head, lot 35, con. 2, Trafalgar tp.
- 28,291 13 Flints, lot 35, con. 2, Trafalgar tp.
- 28,292 Little pemmican bag, Long Lake, Thunder Bay District, Edmund Morris.
- 28,293 Loom, with web of pandanus leaf, fibre cloth. Santa Cruz Islands, north of New Hebrides, S. Pacific. Gift of Rev. Jos. Annand.
- 28,294 Modern pottery, Mexico, Mrs. De Ganahl, 189 Bloor street W.
- 28,295 Modern pottery, Mexico, Mrs. De Ganahl, 189 Bloor street W.
- 28,296 \*Walrus tusk, John Small, Esq., Berkeley House, Toronto.
- 28,297 \*Walrus tusk, John Small, Esq., Berkeley House, Toronto.  
Nos. 28,296-7 presented to Mr. Small by Lieut. Smithe of the R. Navy. He procured them when on an expedition to the Arctic regions about 25 years ago.
- 28,298 Copper tool. Gravel pit near Nepigon, Ont. Wm. McKirdy.
- 28,299 Stone axe. Williamsburg tp. A. L. Castleman.
- 28,300 \*Lizard and Tarantula. Bartle, Cuba. Collected by Geo. Johnson.  
Presented by Archibald Hope.
- 28,301 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
- 28,302 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
- 28,303 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
- 28,304-6 Three skulls and other human bones. From shallow grave on the farm of Mr. Tyer, near Islington, Etobicoke tp., York co.
- 28,307 Frame for drying nets, etc. Rev. Dr. R. W. Large, B.C.
- 28,308 Cree bead sash. Purchased by Mrs. J. H. C. Durham at the John Smith Indian Reserve, Sask. Gift of Mrs. J. H. C. Durham, 93 Elm avenue, Rosedale.
- 28,310 Foot shaped or pipe-head shaped stone. Mrs. Hutton, Winnipeg.
- 28,311 Photo of Peruvian pottery (3 pieces). C. G. Scott, Seward, Ill., U. S.
- 28,312 Spindle whorl, Canisby, Caithness, Scotland. Miss Em. D. Nicolson.
- 28,313 Spindle whorl, Canisby, Caithness, Scotland. Miss Em. D. Nicolson.
- 28,314-28,385 Flints. Ozark quarry on the Indian Reservation, near Seneca, Mo., U. S. A. In various stages of manufacture as arrow heads, heavy weapons and tools of various kinds. These specimens are instructive by way of showing the results of rude chippings to produce desired shapes. Some have proved failures. It is undoubted that the chipping or flaking is of artificial origin. By exchange with Dr. W. C. Barnard.
- 28,386 †Cast. The original of the large lance, spear, or dagger head, was very black glossy chert, and a beautiful implement. About 1858 or 59, in grading a street in Grand Rapids, Mich., it became necessary to remove an Indian mound, and this implement was picked up from the dump. It is, therefore, not known what position it occupied, or its relation to other remains, and there is no information as to the structure or dimensions of the mound. This implement was in a small collection belonging to Mr. Alfred Hawkins, Twinsburg, Summit co., Ohio.

\*These and a few others will be transferred to another list.

†Numbers 28,386 to 28,390 presented by N. A. Chapman, Cleveland, Ohio.



- 28,387 Cast. The original of the small sickle shaped scraper is a surface find picked up in a plowed field in Hudson, Summit co., Ohio, in 1885 and now in the collection belonging to Dr. T. G. Griste, Twinsburg, Summit co., Ohio.
- 28,388 Cast. The original of the Turtle cast was found in a plowed field on the Samuel McElroy farm near a spring and not far from the Cuyahoga river in the n.w. part of Northfield, Summit co., Ohio, about 1876, by Mrs. Andy Small.
- 28,389 Cast. The original of the bird ornament with perforated base was found in a plowed field near the Cuyahoga river in the north part of Boston, Summit co., Ohio, about 1871, and it is now in the collection of Dr. T. G. Griste, Twinsburg, Summit co., Ohio.
- 28,390 Cast. The original of the ceremonial axe or butterfly ornament was found in a plowed field on the Wells Farm, corner of Twinsburg, Summit co., Ohio, and Bedford, Cuyahoga co., Ohio, about 1863. The material is banded or novaculite slate. The piece that is gone near the end was broken off when found.

Numbers 28,391 to 28,402 presented by H. A. Van Winckel, Dec. 30, 1907.

- 28,391 Clay pot, mound in Ohio.
- 28,392 Axe, southern Indiana, U.S.A.
- 28,393 Gorget, Indiana, U.S.A.
- 28,394 Stone axe, W. Va., U.S.A.
- 28,395 Stone axe, Mich., U.S.A.
- 28,396 Stone axe, Franklin co., Kentucky, U.S.A.
- 28,397 Stone axe, Ohio, U.S.A.
- 28,398 Pendant, Niagara, Penn., U.S.A.
- 28,399 Stone chisel, Kingston, Ont.
- 28,400 Copper adze, Pittsburg, Ont.
- 28,401 Stone pipe, Manitoba.
- 28,402 Clay pipe, Manitoba.
- 28,404 Plaster cast mask. French name, Katherin Gros-Louis; Indian name, ; Tribe, Huron; Blood, one-eighth white; Reserve, Loretto; Probable age, 30; Height, 5 ft. 4 ins. August, 1906.
- 28,405 Plaster cast mask. French name, Young Man; Indian name, not known; Huron; Blood, one-quarter white; Reserve, Loretto; Probable age, 19; Height, 5 ft. 7 ins. August, 1906.
- 28,406 Plaster cast mask. English name, Thomas Williams; Indian name, Atouwa; Tribe, Mohawk; Blood, one-half white; Reserve, Caughnawaga; Probable age, 55; Height, 6 ft. 1 in. August, 1906.
- 28,407 Plaster cast mask. French name, Mrs. La Salle; Indian name, Kainentison; Tribe, Mohawk; Blood, one-quarter white; Reserve, Caughnawaga; Probable age, 45; Height, 5 ft. 4 ins. August, 1906.
- 28,408 Plaster cast mask. French name, Louis Beauvier; Indian name, Awennatekha; Tribe, Iroquois; Blood, one-quarter white; Reserve, Caughnawaga; Probable age, 12; Height, 4 ft. 8 ins. August, 1906.

- 28,409 Plaster cast mask. English name, Mrs. Mitchell Cold; Indian name, Serik Koesaki; Blood, one-quarter white; Reserve, Oka; Probable age, 68; Height, 5 ft. 2 ins. August, 1906.
- 28,410 Plaster cast mask. French name, Abraham La Favre; Indian name, Latagarate; Iroquois; Blood, one-quarter white; Reserve, Oka; Probable age, 60; Height, 5 ft. 6 ins. August, 1906.
- 28,411 Plaster cast mask. English name, John Isaacs; Indian name, Watiasawiasekawa; Iroquois; Blood, full; Reserve, St. Regis; Height, 5 ft. 5 ins. August, 1906.
- 28,412 Plaster cast mask. People, Igorottes; Locality, Bontoc, n.w. of Isle of Luzon; Name, Laidis; Age, 18; Weight, 135 lbs.; Height, 60 ins.; Chest, 35 ins.; Head,  $21\frac{1}{2}$  ins.; Arm, 60 ins. August, 1907.
- 28,413 Plaster cast mask. People, Igorottes; Locality, Bontoc, n.w. of Isle of Luzon; Name, Casma; Age, 30; Weight, 120 lbs.; Height, 55 ins.; Chest,  $31\frac{1}{2}$  ins.; Head,  $24\frac{1}{4}$  ins.; Arm, 58 ins. August, 1907.
- 28,414 Plaster cast mask. Igorotte, young woman.
- 28,415 Plaster cast mask. Igorotte, small boy.
- The plaster masks were made from life by Mr. Gordon V. Osborne, of Toronto, when the Igorottes were on exhibition at the Fair, in 1907.

Numbers 28,416 to 28,573 presented by Mrs. Alfred Willson.

- 28,416 Iron tomahawk. Beverly Tp., Wentworth Co., Ont.
- 28,417 Adze, Bosanquet Tp., Lambton Co., Ont.
- 28,418 Axe, Bosanquet Tp., " " "
- 28,419 Adze, Bosanquet Tp., " " "
- 28,420 Adze, Bosanquet Tp., " " "
- 28,421 Adze, Bosanquet Tp., " " "
- 28,422 Axe, Bosanquet Tp., " " "
- 28,423 Axe, Ont., Bosanquet Tp.
- 28,424 Axe, Stephen Tp., Huron Co., Ont.
- 28,425 Axe, Stephen Tp.,
- 28,426 Adze, Stephen Tp.,
- 28,427 Adze, Ont. " " "
- 28,428 Axe, Stephen Tp. " " "
- 28,429 Polishing or rubbing stone, Lot 5, Con. 6, Bosanquet Township.
- 28,430 Adze, Bosanquet Tp.
- 28,431 Axe, Stephen Tp., Ont.
- 28,432 Axe, Stephen Tp., Ont.
- 28,433 Axe, Ont.
- 28,434 Axe, Ont.
- 28,435 Chisel, Ont.
- 28,436 Chisel, Ont.
- 28,437 Chisel, Ont.
- 28,438 Axe, Bosanquet Tp., Lambton Co., Ont.
- 28,438 $\frac{1}{2}$  Stone sinker, Ont.
- 28,439 Bone found on Lot 33, L. R. W. Bosanquet Tp., 50 feet east of river and 17 ft. below the surface, April, 1874.
- 28,440 Bone awl, Nottawasaga Tp., Ont.
- 28,441 Bone awl, Nottawasaga Tp., Ont.

- 28,442 Fragments of Pottery (6 pieces), Nottawasaga Tp.  
28,443 Fragments of Pottery (12 pieces), Grand Bend, Bosanquet Tp.  
28,444 Arrowhead, Tenn., U.S.A.  
28,445 Arrowhead, Tenn., U.S.A.  
28,446 Arrowhead, Georgia.  
28,447 Arrowhead, Georgia.  
28,448 Arrowhead, Virginia.  
28,449 Arrowhead, Nottawasaga Tp.  
28,450 Arrowhead, Nottawasaga Tp.  
28,451 Arrowhead, Nottawasaga Tp.  
28,452 Arrowhead, Nottawasaga Tp.  
28,453 Scalping knife (?), Nottawasaga Tp.  
28,454 Arrowhead, Bosanquet Tp.  
28,455 Arrowhead, Bosanquet Tp.  
28,456 Arrowhead, Bosanquet Tp.  
28,457 Arrowhead, Bosanquet Tp.  
28,458 Arrowhead, Bosanquet Tp.  
28,459-66 Arrowhead, Stephen Tp.  
28,467 Scrapers or stunners, Stephen Tp.  
28,468 Scrapers or stunners, Stephen Tp.  
28,469 Drills?  
28,470 Drills?  
28,471-28,522 Arrowheads, Bosanquet Tp.  
28,523-28,566 Flints, Bosanquet Tp.  
28,567 Sailor's wooden tool (use unknown).  
28,568-28,572 Clay pipe (Huron Iroquis) Nottawasaga Tp.  
28,573 Clay pipe stem (Huron Iroquois) Nottawasaga Tp.

Numbers 28,574-28,578 purchased from Miss L. Augustus Bull, Weston.

- 28,574 Tear Jar, Damascus.  
28,575 Tear Jar, Sidon.  
28,576 Tear Jar, Sidon.  
28,577 Tear Jar, Simasoll.  
28,578 Tear Jar, Simasoll.
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## REVIEW.

It has been suggested that the "coming of age" of the Archæological section of the Provincial Museum would prove a fitting time to review its past and to observe where it stands to-day. In accordance with this suggestion the following notes are presented.

It may be premised that many years before the idea of forming the present collection took shape, at least one attempt had been made to bring together a Canadian collection of material to illustrate aboriginal life. The effort in question was, in all probability, made by Sir Sandford Fleming, in connection with the Canadian Institute, but it does not appear to have met with any large measure of success, either because of difficulty in bringing specimens together, or, that having been collected, they disappeared in various ways, for the want of case accommodation in the Institute's building.

There was nothing like too much enthusiasm shown among the members of the society in question when the last proposition was made to form even an apology for an archæological museum in Toronto. The only exception to this feeling was shown by Prof. W. H. Vander Smitten, who was president of the Institute that year—1886-7—and who exerted himself considerably in various ways to further the scheme, even to the extent of contributing some money to aid in the printing and mailing of a circular asking for contributions of specimens.\*

In course of a short time, however, sufficient interest became aroused to warrant the appointment of a committee to solicit a small appropriation from the Provincial Legislature, because it should be remembered work had been proceeding in a quiet way for several years, the nucleus of the collected material having been formed by the gift of the curator's private material, consisting of some 900 odd specimens.

The committee referred to received a respectful hearing from the government in 1885, and succeeded in procuring a grant of \$1,000 for the

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\*The following is a copy of the circular, and Sir Sandford Fleming some years afterwards, assured me that it was based on one he had issued, in connection with what has already been mentioned as the first attempt to direct general attention to matters archæological in this country.

- "1. Is there any mound, tumulus, or intrenchment in your neighborhood?
2. Are there any elevations which, from their regularity or for any other reason suggest an artificial origin?
3. What are the dimensions and area of these from actual measurement? If possible, give a plan with sections.
4. What are the physical features of the situation and vicinity?
5. Are there any evidences of the place having been surrounded with posts or pickets?
6. Are there still, or were there before "clearing," trees of large size within the area of the work? If so, state kind and size, also number of annual growth-rings on largest stump.
7. Are stone or bone weapons of any kind, or fragments of pottery ploughed up in the neighbourhood?
8. Have any copper implements of native manufacture been discovered? What?
9. Have any iron or copper articles been found indicating intercourse with Europeans? What?
10. Are there any local names of Indian origin in your township or neighborhood? If so, kindly make a list of them, indicating their correct pronunciation, stating their meaning, and the local or traditional circumstances from which they originate.
11. Names of township and county, and numbers of lot and concession in which any mound, ossuary, intrenchment, old village site, or battle-ground exists.
12. Name of any local collector of Indian relics, or of any persons who are interested in Canadian Archæology."

ensuing year. For ten years this and succeeding annual appropriations were mainly—almost wholly—expended in travelling expenses, supply of cases, employment of men to dig, and freight or express charges, so that all office work had to be performed almost gratuitously, although on the assurance of the Honorable the Minister of Education it was originally intended that six hundred dollars of the grant was to be expended directly for the curator's services, but of which understanding no intimation ever reached his ears from the treasurer of the Canadian Institute, through which payment of the grant was made, purely for archæological purposes.

When the first report 1886-7 was issued, it contained an account of the first field work done as a result of the legislative appropriation, and the Canadian Institute availed itself of this opportunity to print free of cost, its own annual report as well as sub-reports from the biological, architectural, photographic, philological and geological sections, although the only connection that ever existed between the archæological work and this society consisted in the fact that the latter kindly consented to permit the use of its attic space to accommodate the archæological cases; this was all, yet after the removal of the specimens to the Education Department, the Legislature was good enough to acknowledge a claim for an increased annual grant to the society, on the plea that the removal of the museum to its present quarters in the Education Department buildings was a loss to the Institute. This explanation is necessary to show why the Reports of the Canadian Institute appeared for some years as part of the archæological Reports, and thus led to a confusion which yet exists to some extent.

In the first report reference was made to an examination of some ground on the rear of lot 2, con. 1, West York township, and to gifts of numerous specimens from that neighbourhood by the late B. Jackes, of Toronto, by Mr. W. G. Long, an enthusiastic amateur archæologist, of Lansing, near by, and by Miss Marshall, the local school teacher.

It was also recorded that on the invitation of Mr. C. A. See, of Gananoque, his property on Tidd's Island in the St. Lawrence River had been searched by the curator for Indian material, with permission to appropriate for museum purposes all that might be found. Similar privileges were accorded by Messrs. Louis Bedard and Laurence O'Neil so far as their portion of the island was concerned, with the result that a number of very good specimens were added to the Museum.

Mr. C. A. See was also generous in presenting us with all the material he had picked up in the course of his own work on a mound at the western end of Tidd's Island.

During this season too, the site of an ancient palisaded fort was examined on the farm of Mr. Wm. Gilbert, lot 26, con. 8, Beverly township, Wentworth county, under the guidance of Mr. Wallace McDonald, the well known clerk of the township. On the assurance of Mr. McDonald that close by at least 300 iron tomahawks had been turned up by the plough, the conclusion was reached that the site was connected with some French expedition from Quebec to what was then the "far west." In addition to the valuable assistance rendered on this occasion by Mr. McDonald, much aid came from the late Miss Robertson, from Mr. and Mrs. Gilbert, owners of the property, from Mr. Joseph A. Smith, P. S. I. for the county, and more than all from Mr. James Dwyer and Mrs. Dwyer, on whose farm an ossuary yielded very richly. Mr. and Mrs. Dwyer also presented the whole of their own collection.

Shortly after this a visit was made to Humberstone township, on Lake Erie, where an ossuary was reported by Miss Emma Crosson. This ossuary was quite unique as to position, lying as it did on *low land*, surrounded by sand hills from 20 to 30 ft. high. A good many skulls were taken from this communal grave. Mr. Cyrenius Bearse, a highly intelligent and successful farmer, was more than kind. He and Mrs. Bearse did everything possible to assist in the work. From Mr. Bearse on this occasion we received our first piece of whole pottery, which was taken from a sandhill on the shore of Lake Erie.

Some time was spent this year also on the Baby estate at Lambton, York county, where there had been a long established early trading-post at the southern entrance to the Huronian (Humber) trail.

In June of the same year—1886—Nottawasaga in the heart of the Tiononnate country, received a good deal of attention and the returns in archæological material were very good. Quite a number of village sites and ossuaries were examined, which through want of time on a former visit, had not even been seen. On this occasion much assistance was given by Mr. Robert Loughheed, and numerous excellent specimens were contributed by him, and by Mrs. Ed. Beecroft, Mrs. Adam, of Creemore, Mr. John Hannah and the Masters Connor, of Glen Huron.

The last named young men presented the Museum with gleanings of their father's fields for several years, and these finds were particularly rich in clay pipes, illustrative of Tobacco Nation life.

During the year, too, a visit was paid to the Six Nations Reserve in Tuscarora township, Brant county, in company with De-ka-non-ra-neh, who introduced me to chief Ska-na-wa-tih (the venerable John Buck), who displayed and explained for us the large stock of wampum strings and belts in his possession as Fire-keeper of his people—the Iroquois.

A supposedly artificial mound was examined near the village of Troy, and the conclusion arrived at was contrary to the supposition.

The township of Beverley proved an excellent "hunting ground" under the guidance of such gentlemen as Messrs. Wallace McDonald, James Dwyer, Jas. Rae, A. McKnight, and Rt. McQueen, Teacher, Kirkwall, who seemed to know every point of archæological interest in the neighborhood.

During this season also, a considerable number of specimens were added to the Museum from Nottawasaga, North Simcoe. Most of the Nottawasaga material came from the farm of Mr. Robert Loughheed, where there would appear to have been at one time not fewer than fifty lodges, and single habitations—a good sized village.

In 1887-8 when much of the Curator's time was spent in Cincinnati in connection with Ontario's first mineral display at the Ohio Valley Centennial Exposition, a considerable quantity of archæological material was procured by exchange for mineral specimens. In this way we added to our store, for comparative use, from North Carolina, Georgia, West Virginia, Tennessee, Mississippi, Alabama, Kentucky, Ohio, Indiana, Arkansas, and in less degree from a few other states.

In 1887-8 report, Dr. A. F. Chamberlain began a series of annual "Contributions towards a Bibliography of the Archæology of the Dominion of Canada and Newfoundland," and in these papers he succeeded in bringing together an admirable epitome of the writings on matters archæological relating to our country.

Among those who contributed in various ways, especially in the presentation of Indiana, Ohio and Kentucky specimens, were Drs. Craig



and Collins of Lawrenceburg, Ind. In company with these gentlemen, too, opportunity was given to visit several mounds and other earth works within easy reach of Cincinnati and Lawrenceburg.

About this time, too, Mr. James Dickson, Provincial Land Surveyor, Fenelon Falls, presented us with his own private collection, which, up to that time, was, perhaps, the most valuable gift of the kind the Museum had received.

In May of this year we purchased a small but very valuable collection from Dr. C. Dickson of Kingston, illustrative of aboriginal mechanism among the people who had inhabited the Thousand Islands. This collection included a good many copper specimens of various kinds.

From Dr. R. B. Orr, then of Maple, now of Toronto, we received some of the very best specimens in the Museum (especially of pottery) and ever since the same gentleman has remained "a friend indeed."

Mr. William Matheson of Lucan, had been for several years bringing together a private collection of archæological material from Middlesex and portions of adjoining counties—Huron, Perth, Oxford—and this collection was purchased from him.

The Rev. Th. Laboureau of Penetanguishene, presented some specimens illustrative of the French period among the Hurons, and W. Ransom, Esq., an English gentleman, residing in Hitchin, Hertfordshire, donated through the late Mr. J. H. Pearce, a number of British and French paleoliths.

At the close of the Report for 1887-8 these words occur:—"The collection is beginning to assume a character such as to warrant the belief that in a few years the Province of Ontario will possess an Archæological Museum, which, if not what it might have been with an earlier start, will, at all events, go a long way towards placing us on an equal footing in this respect with other progressive nationalities."

It is now pleasing to be able to say that this condition has been realized to some extent, although much remains to be done, and it is extremely gratifying to know that the Minister of Education is fully in sympathy with the desire to form reference and study, ethnological collections, illustrative of Canadian aboriginal life, on a scale, not by any means of extravagant pretensions, but one worthy of our Province and its position in the Dominion.

In 1888-9 much time was given to a somewhat detailed examination of village sites, ossuaries, and single graves in Nottawasaga township—classic ground in the history of Canada.

It may be added here that since that time more work of a very valuable kind has been performed in the same district by Mr. A. F. Hunter of Barrie, and more recently still by the Rev. A. E. Jones, S.J., of St. Mary's College, Montreal. Father Jones has devoted much study to the allocation of sites mentioned in the Jesuit Relations and has arrived at conclusions differing in several important respects from those reached by other students on the subject. He is, without doubt, the best living authority on Indian village sites in North Simcoe.

As the result of information supplied by Mr. Thomas Boon of Bothwell, I spent several days on the embanked village site near the village of Clearville, Kent county, where, with the assistance of Mr. Boon and the proprietors of the property, Messrs. Ridly and Bury, much good work was accomplished, and numerous additions made to the Museum.

Shortly afterwards a little attention was devoted to a mound at Port Colborne, where several whole pieces of pottery had been found with a number of skulls, but these were all taken away to the United States, by the finders.

More recently (in fact only last year) we acquired from the same place several skulls, and an excellent specimen of whole pottery (see Rep. 1906, p. 15).

Near the village of Maple, not far from Richmond Hill, an Indian village site was visited in company with Drs. R. B. Orr, and Noble of Maple, Wilson of Richmond Hill, Orr of Toronto, Watson of Sherwood, the Rev. Mr. Rutledge of Richmond Hill, and the Messrs. Smelser of Vaughan. A few days before this Dr. R. B. Orr had found here, the fragments of a large clay pot—the largest vessel of its kind ever found in the Province. Last year this was carefully restored and a cut of it will be seen at figures 1 and 2, p. 20, in this Report.

Not far away on lot 12, con. 3, Vaughan township, we opened an ossuary, and, with the consent of Mr. Keffer, the owner of the farm, examined it most thoroughly.

According to Dr. R. B. Orr's estimate this burial pit contained not fewer than eight hundred human skeletons, and from these we secured about eighty skulls, in good condition. No artificial material was found.

In 1890-1 we came into possession (first by loan, afterwards permanently) of three very good private collections, viz.: those of Messrs. W. G. Long, and George E. Laidlaw, and of Dr. Tweedale. The Long collection was made within a few miles of this city, the Laidlaw one near Balsam Lake, Victoria county, and the Tweedale collection, in the old Attiwandaron country, of which St. Thomas may be regarded as the centre.

Up to this time and working without any experience of an extensive kind, an attempt was made to separate our specimens into classes, beginning a new series of numbers with each class, but this confusing system was abandoned in 1890, when the present straight serial system was adopted.

During this year considerable work was done round Southwold Earthwork in Elgin county, Tuscarora and Oneida in Brant county; Balsam Lake (with Mr. G. E. Laidlaw) in Victoria county; Lake Weslemcoon (with Prof. A. F. Chamberlain, Ph. D.) in Addington county; Midland and the Old Fort at Ste. Marie, in Simcoe county; Parry Sound and Parry Island, in Parry Sound District, and Point Abino and Humberstone township, in Welland county. It will thus be seen that the districts formerly occupied by the Hurons and Attiwandarons were fairly well covered.

In the following year the extremely interesting and wholly unique earthwork at Southwold was again examined, as was another less remarkable in the township of Malahide not very far away. In Camden township Addington county, Dr. M. I. Beeman kindly acted as cicerone, and pointed out several remarkable, aboriginal, topographical features, as did Mr. Pub. School Inspector, Arthur Brown, in the township of Williamsburg, within a few miles of the town of Morrisburg.

Under the guidance of Dr. T. W. Beeman of Perth many localities were visited in Lanark county. On this occasion a large number of specimens were contributed (mainly through Dr. Beeman, by his intelligent band of co-workers in the Rideau Valley.)

In 1893 we made an exhibition at the Chicago World's Fair, and although this necessitated a prolonged absence of the curator from Ontario, it was the means of bringing him into touch with like-minded people from other parts of the world, especially of the United States, and thus numerous valuable exchanges were then either effected or arranged for.\*

Among those who aided us most effectually during 1893 were Messrs. E. C. Waters of Brantford, Chief Dek-a-non-ra-neh of Ohswekin Reserve, and F. W. Waugh, Brantford, but our largest number of accessions came from the county of Lanark, where they were collected by our perennial and public-spirited friend, Dr. T. W. Beeman, Perth, assisted by the many collaborators whom he had succeeded in animating to a high pitch of enthusiasm.

It would not be easy to say whether, for voluntary contributions, involving the expenditure of much time and money, the Provincial Archaeological Museum owes more to him or to Lieut. G. E. Laidlaw of the Fort Ranch, Victoria county. Both gentlemen deserve more than ordinary credit for their patriotic efforts to make the Museum what it is, and it is no doubt gratifying to them to know that their generosity has not only proved so beneficial, but that it is so highly appreciated.

Another contributor this year whose name should not be forgotten, was Mr. W. G. Wright of Collingwood.

When attending the Chicago World's Fair, we acquired a good many specimens illustrative of primitive life in Illinois, Wisconsin, Ohio, Tennessee, New Mexico, and France. Here, too, for a small sum, we purchased the Niven (Aztec) collection, numbering some six hundred pieces. These yet form with the exception of the Mrs. Stewart material the only collection we have from México, and are one of the most interesting of groups in our cases.

A few samples of Pueblo, Cliff-Dweller and New Mexican pottery also came into our possession, through Mr. Don Maguire, of Ogden.

In 1894 examinations were made of an earthwork a short distance north of Morrisburg, in Dundas county, and of another between the towns of Berlin and Waterloo in Waterloo county, in the latter case, with the assistance of Mr. Jacob Stroh, of Waterloo. Mr. Stroh is himself an ardent student of archaeology and possesses much information relating to his part of the county.

One of the most interesting localities in the province is to be found on the farm on lot 20, Con. 4, in London township, Middlesex county. On this occasion I was accompanied by Prof. Wolverton of the Western University, who had on several occasions been over the ground, and who himself has brought together no small quantity of valuable material.

Still another earthwork was examined on lots 10 and 11 in Dorchester, Middlesex county. Rough surveys and drawings of both places were made, and appeared as illustrations in the annual report for the year.

At Mud Lake, on lot 15, Con. 11, Drummond township, a long bank that was thought to be of human origin proved to be a granite reef—an upheaval.

In Manvers township, Durham county, it came somewhat of a surprise to find ossuaries, considerably east of what had hitherto been regarded as Huron country. Here, however, the ossuaries were on low ground. In these were found numerous skulls, and a good many other human bones in a fair state of preservation, the limb bones lying in groups as they had been tied in bundles when the interment took place.

Information respecting another burial place of this kind came from Dr. McClinton, of Elmvale. This ossuary was lot 72, Con. 2, Flos town-

\* The Institute used the legislative grant for 1902 to bind pamphlets!



ship, Simcoe county. Although the presence of iron, sheet-copper, and brass rings proved this burial-place to be of post-discovery origin, the bones were much decayed, but five good skulls were procured. Here, too, were found specimens of the rare runtee form of wampum, or shell bead.

Dr. T. W. Beeman, of Perth, Lanark county, had frequently heard reports of certain graves along the banks of the Mississippi River, and that these were connected with the water front by means of narrow passages or tunnels formed of stone. We both spent a day in the search for these graves, but did not find them. A resident of the neighbourhood, who was supposed to know all about them, took us by canoe, and such a canoe! to show us where the graves were, but the places bore no resemblance to graves and the tunnels were invisible. The only suggestion of graves, was on one occasion when the frail, leaky craft looked like letting the three of us find places for our own bones in the bottom of the river.

The Massanog rock paintings were examined and copied during this season by Dr. Beeman and myself.

1898. The principal work of this year was a study of the ceremonies connected with the New Year observances of the pagan Indians on the Grand River Reserve, where the invaluable services of J. Ojijatekah Brant-Sero were utilized as interpreter.

In 1899 totally new ground was struck in Pelee Island, Canada's most southerly point, near the west end of Lake Erie. Several mounds at the south end of the island were opened, but nothing of any importance was noted in connection with these examinations.

This year we had accounts from the pens of Messrs. G. E. Laidlaw, A. F. Hunter and W. J. Wintemberg, of the investigations they had made privately or non-officially in the counties of Victoria, Simcoe, and Oxford and Waterloo, respectively.

Mr. W. E. Connelley of Topeka, Kansas, in the report for the year (1899) was good enough to supply a highly valuable essay on the Wyandots, who were akin to the Huron people. In this paper, Mr. Connelley treated their Legends, Clan System, Government, Proper Names, and other topics.

During 1900 but little field work was done beyond the examination of several village sites in Oxford and Waterloo counties by Mr. Wintemberg. Of this work he prepared a good account which appeared in the annual report, to which also a paper on The Flint Workers—A Forgotten People, was contributed by the Very Rev. Dean W. R. Harris, and others by Mr. Wintemberg, Lieut. Frederick Hamilton, and Mr. A. F. Hunter, M.A.

In 1901 an ossuary and a mound were examined in Clinton township, Lincoln county, an earthwork of considerable importance on lot 26, con. 11, Moore township, Lambton county. The last named was visited in company with the late Dr. T. G. Johnston, M.P., of Sarnia, and the late Mr. Alfred Willson, C.E., Manager of the Canada Company. Mr. Willson made a fairly accurate survey of the ground.

Mr. Wintemberg examined a Supposed Fish Weir near Drumbo, Mr. L. D. Brown contributed a paper to the report, on Indian Occupation in Nissouri; Mr. W. Brodie, on Animal Remains on Indian Village Sites, Mr. F. W. Waugh, Notes on Canadian Pottery, Mr. A. F. Hunter, On Wampum Records of the Ottawas, as well as one,—Notes on Huron Villages in Medonte, while there were two papers by Mr. Geo. E. Laidlaw—Notes on North Victoria Village Sites, and Some Ethnological Observations in South Africa.

In 1902 an ossuary was examined at Bradford, Simcoe county, but when the spot was reached, it was found that "curio" seekers had almost destroyed the appearance of the place—wholly so, indeed for any scientific

purpose. A ghoulish craze seemed to have taken possession of many people in the village, so that in passing along its principal street skulls were seen on window-sills, while in not a few sitting-rooms they occupied prominent places on centre-tables!

Mr. Stibbs, the owner of the ground was anxious to have all the skulls placed in the Provincial Museum, but not a single person showed any willingness to give up his gruesome specimen—that which he might show to his or her more rural visitors, especially ladies, and over which utterances might be bandied in solemn tones with deep-drawn sighs, while the speakers were fully of the belief that their made-to-order-moralisings were the outcome of pure and undefiled religion!

At least one man contemplated having the top of his skull sawn off to form an ink-bottle stand! Of course he meant his *Indian* skull, but this was a mistake!

Dr. J. E. Brown in this year presented the museum with two perforated skulls taken from an ossuary in Warwick township, Lambton county. In both skulls the holes have evidently been bored, not cut, and after death at that.

Examinations of village sites were made by Mr. G. E. Laidlaw in North Victoria, and by Mr. W. J. Wintemberg in Waterloo county, by Mr. F. W. Waugh in Brant county, and by the late Mr. R. T. Anderson on Sites in Yarmouth, Malahide, and Bayham townships.

In this Report also the Rev. A. E. Jones, S.J., presents his story of the "Identification of St. Ignace II., and of Ekarenniondi," two long disputed sites in connection with the Jesuit Missions in this Province.

In 1903 most of the curator's time was spent in the museum, on account of the removal of the material from its old quarters, but some of our amateur friends busied themselves in different parts of the province and reported the results for publication in the reports. As a matter of course the perennial enthusiasm of Lieut. G. E. Laidlaw, who has made North Victoria his own archæologically, gave us an interesting article on Village Sites in his county, and as usual presented the museum with his highly valuable gleanings. Mr. A. F. Hunter described "Indian Village Sites in North and South Orillia" and our particular friend, the Rev. Dean Dr. W. R. Harris, wrote for us, "The Caribs of Guiana and the West Indies," among which people he had spent considerable time.

Not the least interesting, as well as instructive article in the report for the year was that entitled "The Killing of Moostoos, the Wehtigoo," which consisted wholly of an abbreviated court report of the evidence taken at the trial of two Crees, Payoo and Napaysoossee for the killing of another named Moostoos, who, himself declared that he was about to become a Wehtigoo (Wendigo, or bad spirit) and would eat everybody. The material for this instructive article came to us from Mr. J. R. Boyle, M.P.P., Edmonton, Alberta.

Official duties in 1906 demanded all possible time in the Museum where it was found necessary to do a good deal by way of re-arranging and, in many cases, re-classifying material, but Mr. W. H. C. Phillips, a temporary assistant, was sent to examine the rock paintings on Lake Nonwakaming, and Lady Evelyn Lake in the Temagami District. Drawings of these were made, and they appear as illustrations in the year's report.

In 1907, I visited (in company with Mr. C. W. James, Secretary of the Education Department) the River Nipigon where similar aboriginal paintings were known to exist. These also were copied by us and illustrations of them appear in this report.

## NOTES ON SOME SPECIMENS.

## POTTERY.

It is extremely difficult to find perfect specimens of pottery in Ontario. When these have been placed in shallow graves, or not far from the surface in deeper ones they are always found in a fragmentary condition.



Fig. 1.

Most of the whole specimens in the Museum (only a small number) have been found in unexposed places, such as rock ledges, several feet above the ground, where they were probably placed for preservation during the absence of the people who owned them. It may have been the custom to keep one or more vessels of this kind at various camping-places, thus avoiding danger of breakage in the carrying of such fragile utensils through the woods, along narrow trails.

Even when one discovers large numbers of fragments on or near the site of some old dwelling-place, it is almost impossible to fit enough pieces to form a whole pot.

Dr. R. B. Orr, of Toronto, on one occasion was fortunate enough, or, perhaps it should be

said, persevering enough, to match pieces, forming the complete mouth or lip of a very large pot, measuring 17 inches in height and  $17\frac{1}{2}$  inches in diameter across the body. The full form is shown as restored, at figure 1. No attempt has been made to assimilate the color of the stucco, with that of the fragments, as the only object of restoration was to bring out the original shape of the dish, but unfortunately the workman forgot to make



the bottom as round as it ought to be. Round the lip of this pot there is a flat border, relieved with diagonally incised lines, as shown by means of the accompanying sketch.

This huge vessel was found in the township of Vaughan not far from Richmond Hill, a part of the country formerly occupied by some people closely akin to the Hurons or Wyandots.

Another clay vessel (figure 2) not quite so large (16 inches high, and nearly the same in diameter) was found in Nottawasaga. It has also been restored, as per figure 2, the lighter portions showing the added plaster-of-paris.

In each case there were enough fragments to indicate the original shape without any doubt.



Fig. 2.

#### CATLINITE (red pipestone).

"Smoking was a custom of great moment among the aborigines of northern America, and much time and labor were expended in the manufacture and decoration of the tobacco pipe, which is often referred to as 'the sacred calumet,' because of its important place in the ceremonial affairs of the people. A favorite material for these pipes was the red clay-stone called catlinite, obtained from a quarry in S. W. Minnesota, and so named because it was first brought to the attention of mineralogists by George Catlin, the noted traveler, and well-known painter of Indians. Stone of closely analogous characters, save in the matter of color, is found in many localities and has been used by the Indians for the manufacture of pipes and other articles, but so far as known to us it has not been quarried in most places to any considerable extent. Catlinite is a very handsome stone, the color varying from a pale grayish-red to a dark red, the tints being sometimes so broken and distributed as to give a mottled effect. It is a fine-grained, argillaceous sediment, and when freshly quarried is so soft as to be readily carved with stone knives and drilled with primitive hand drills. The analysis made by Dr. Charles F. Jackson, of Boston, who gave the mineral its name, is as follows:—Silica, 48.20; alumina, 28.20; ferric oxide, 5; carbonate of lime, 2.60; manganoous oxide, 0.60; magnesia, 6; water, 8.40; loss, 1.

"The deposit of catlinite occurs in a broad, shallow, prairie valley, on the margin of which is situated the town of Pipestone, county seat of Pipestone Co. The outcrop was probably discovered by the natives where it had been slightly exposed in the bed of the small stream, now called Pipestone cr., which descends into the valley on the E. in a fall 18ft. in height, and traverses the basin, passing out to the N. W. So far as ex-

posed, the stratum of pipestone varies from 10 to 20 ins. in thickness, the band of pure, fine-grained stone available for manufacture of pipes, rarely measuring more than 3 or 4 ins. in thickness. This stratum is embedded between massive layers of compact quartzite which dip slightly to the eastward, so that in working it the overlying quartzite had to be broken up and removed, the difficulty of this task increasing with every foot of advance. With the stone implements in use in early times the process was a very tedious one, and the excavations were consequently quite shallow. The ledge which crosses the stream approximately at right angles had been followed to the right and left by the quarrymen until the line of pittings was nearly a mile in length. These ancient diggings have been almost obliterated by the more recent operations, which, since the advent of the whites, have been greatly accelerated by the introduction of the steel sledges, picks, shovels and crowbars. It is said that with the aid of the whites, blasting had been occasionally resorted to. Some of the present excavations are as much as 10 ft. in depth, and have advanced 20 ft., or more, along the dip of the strata to the E. The usual section now exposed in the deeper excavations, beginning above, shows from 2 to 4 ft. of soil and from 5 to 8 ft. of quartzite resting on the thin stratum of pipestone, beneath which, again forming the bed of the quarry, are compact quartzites. Numerous hammers of hard stone, some roughly grooved to facilitate hafting, have been found about the older pits, and the prairie in the vicinity is dotted with camp sites and tent rings, about which are strewn bits of pipestone and other refuse of manufacture.

"There is a general impression among those who have written on the subject, that the discovery and use of the red pipestone by the tribes is of comparatively recent date, and this is no doubt correct; but, it is equally certain that it was in use before the arrival of the whites in the N. W. This is made clear not only by history and tradition, but by the appearance of the ancient quarry excavations, and especially by the occurrence of pipes and other objects made of it by aboriginal methods in mounds in various sections of the country. This quarry is usually referred to as the sacred pipestone quarry. According to statements by Catlin and others, the site was held in much superstitious regard by the aborigines. Traditions of very general distribution lead to the belief that it was, in the words of Catlin, "held and owned in common, and as neutral ground amongst the different tribes who met here to renew their pipes, under some superstition which stayed the tomahawk of natural foes always raised in deadly hate and vengeance in other places." (N. Am. Indians, II., 201, 1844). Nicollet states (1838) that Indians of the surrounding nations made an annual pilgrimage to the quarry unless prevented by wars or dissensions. Since the earliest visits of the white man to the Coteau des Prairies, however, the site has been occupied exclusively by the Sioux, and Catlin met with strong opposition from them when he attempted to visit the quarry about 1837.

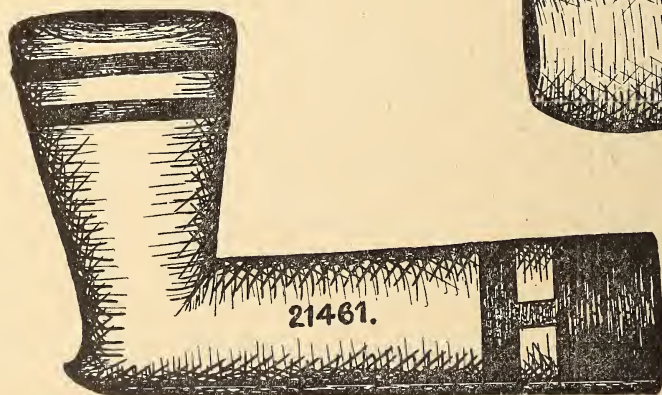
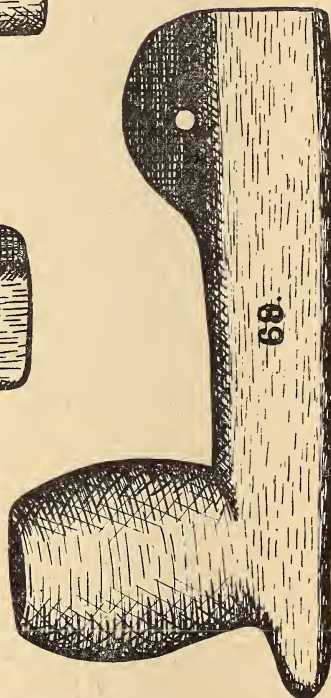
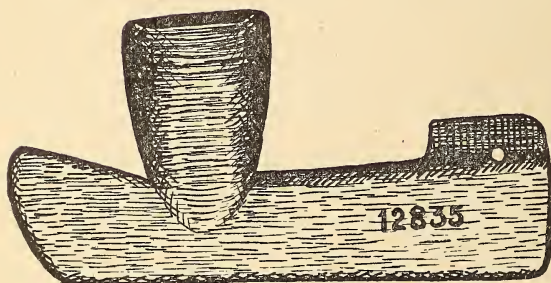
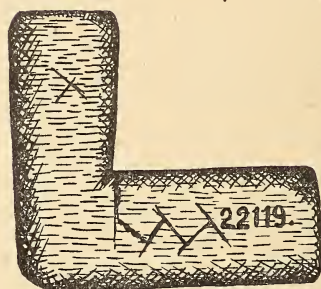
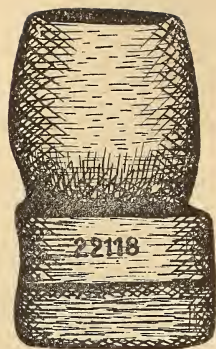
"The following facts regarding the historic occupancy and ownership of the Pipestone quarry are extracted from a statement furnished by Mr. Charles H. Bennett, of Pipestone; 'On April 30, 1803, the region was acquired by the United States through the Louisiana Purchase. On July 23, 1851, the lands, including the quarry, were relinquished to the United States by the Sisseton and Wahpeton Sioux, and on August 5 they were relinquished by the Mdewakanton and Wahpekute Sioux, and 64 chiefs and head warriors who had also a claim. A treaty with the Yankton Sioux, ratified April 19, 1858, specifies that 'the said Yankton Indians

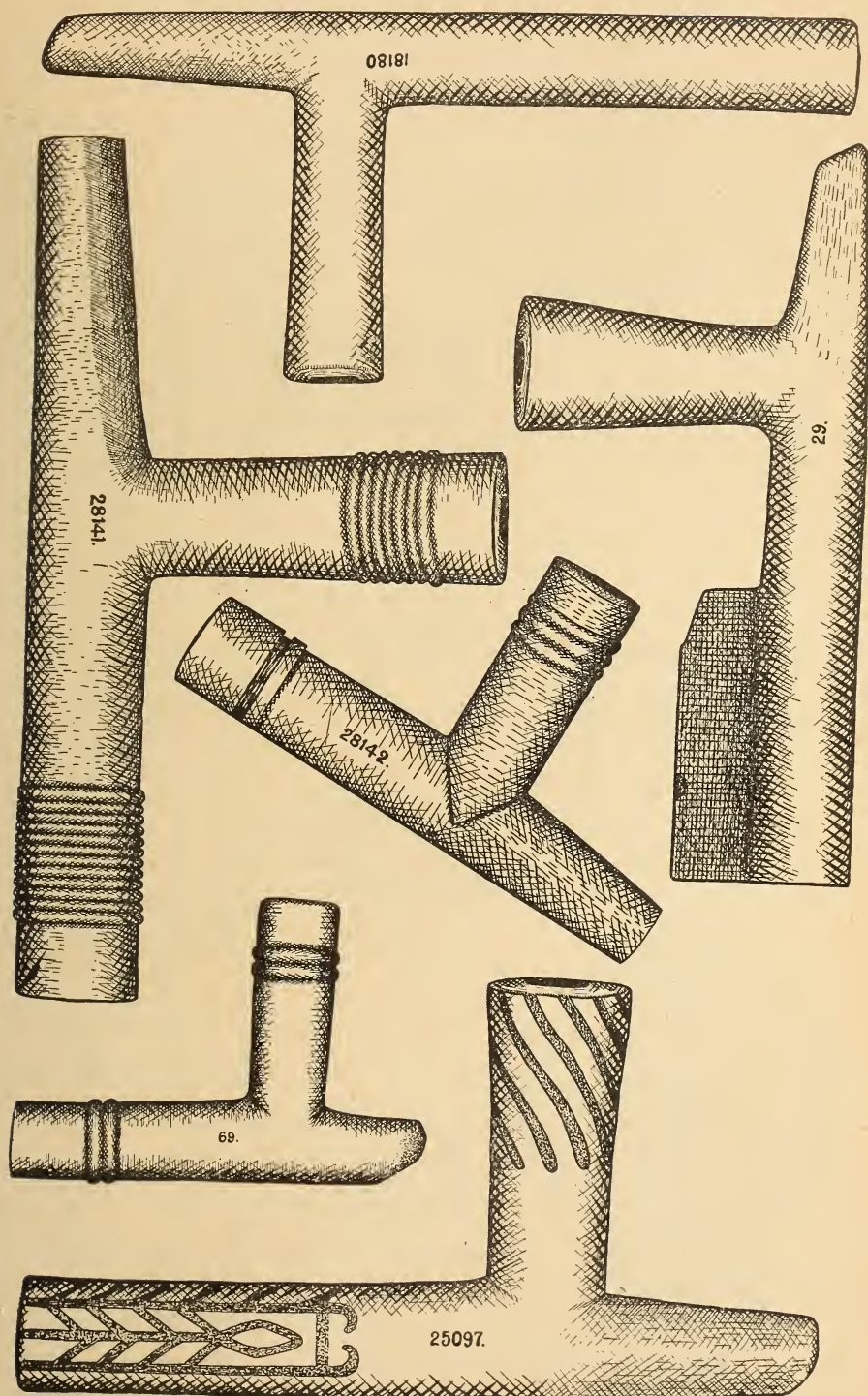
shall be secured in the free and unrestricted use of the red pipestone quarry, or so much thereof as they have been accustomed to frequent and use for the purpose of procuring stone for pipes; and the United States hereby stipulate and agree to be caused to be surveyed and marked so much thereof as shall be necessary and proper for that purpose, and retain the same and keep it open and free to the Indians to visit and procure stone for pipes, so long as they shall desire.' In 1859, one square mile, including the quarry, was surveyed as a reservation, and in 1892 Congress appropriated \$25,000 for the establishment of an industrial school, which is now (1905) being successfully conducted, with several stone buildings and some 200 pupils. It is situated on the highland overlooking the pipestone quarries on the east. The Sioux have no other legal claim upon the quarry site than that of quarrying the pipestone, a privilege of which they yearly take advantage to a limited extent. The Yanceton Sioux, sometimes accompanied by their friends, the Flandreau Sioux, continue to visit the quarry and dig pipestone, coming usually in June or July. They establish their tents on the reservation near the excavations and stay from one to two weeks, procuring the pipestone, which they manufacture into pipes and trinkets of great variety.

The Indians sell much of the stone to the whites, who have taken up the manufacture of pipes and various trinkets, using lathes to aid in the work, and in a letter written by Mr. Bennet in 1892, it is stated that not one per cent. of the pipes then made and disposed of were of Indian manufacture. White traders began the manufacture of pipes from the pipestone many years ago, and according to Hayden these were used by the fur companies in trade with the Indians of the northwest. At a meeting of the American Philosophical Society in 1866, Hayden stated that in the two years just passed, the Northwestern Fur Company had manufactured nearly 2,000 pipes and traded them with the tribes of the Upper Missouri. An important feature of the quarry site is a group of large granite boulders, brought from the far north by glacial ice, about the base of which, engraved on the glaciated floor of red quartzite, were formerly a number of petroglyphs no doubt representing mythological beings associated with the locality. These have been taken up and are now in possession of Mr. Bennett. Additional interest attaches to the locality on account of an inscription left by the Nicollet exploring party in 1838."—From "*Catlinite*," in the *Handbook of American Indians*, by Dr. W. H. Holmes.

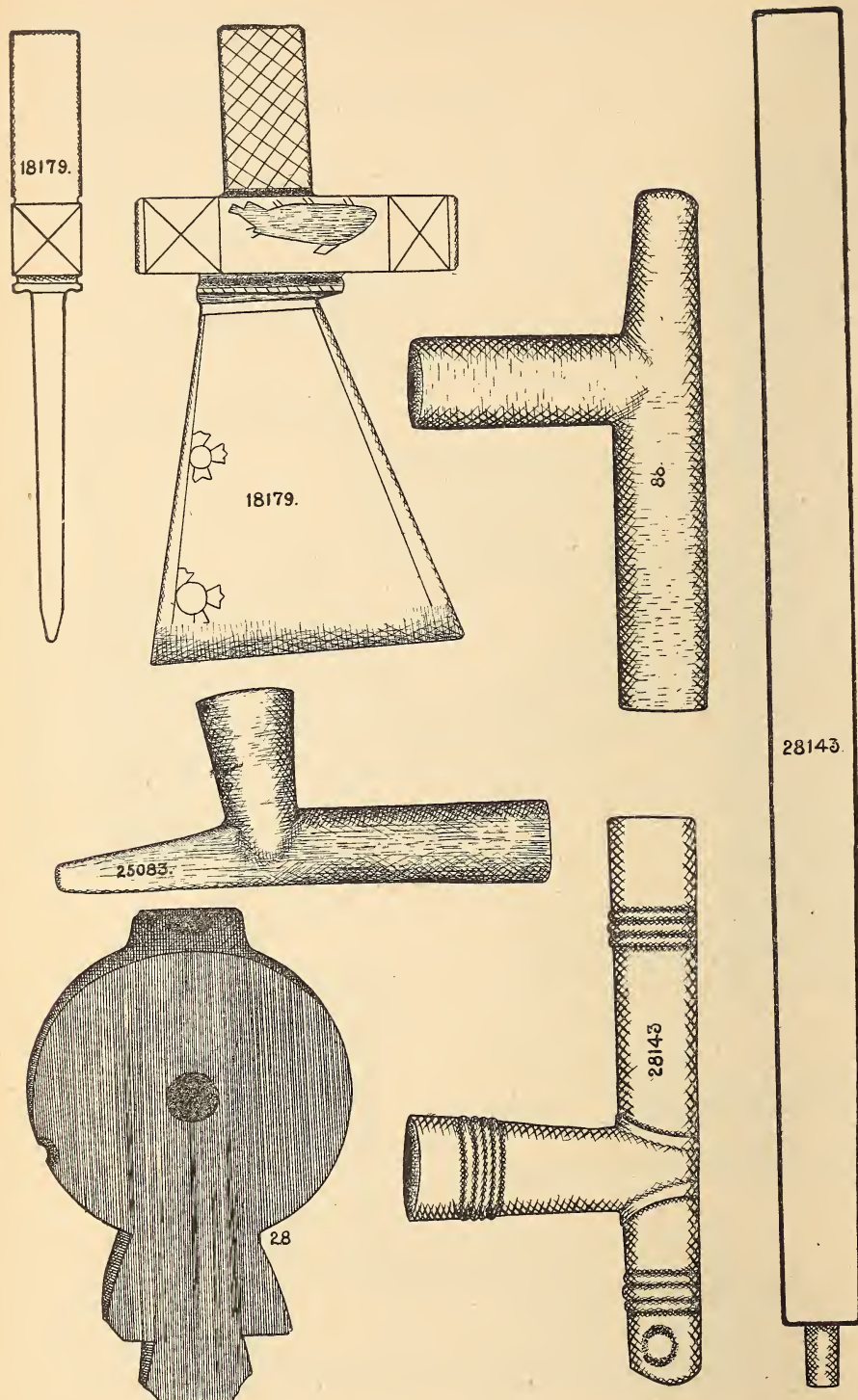
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## CATLINITE PIPES.

Plates I, II and III show drawings of all the catlinite pipes in the Museum, most of these, as might naturally enough be expected, came to us from Manitoba and from adjoining states of the Union, as well as from some of our western provinces, but it is somewhat surprising to find so many that have been collected in Ontario, not of recent importation, but in such places and circumstances as to indicate pre-historic, or very early historic movements.

The color and working qualities of the material were attractive to users as well as to makers, and the finding of such pipes many hundreds of miles from the source of supply, leads us to infer that the pipes were employed in barter of some kind with, eastern, western, and southern peoples, perhaps also with northern ones, but at present we have no knowledge of how far north the trade may have extended.

*On Plate I.*

- 28146 is from the Peigan Reserve, N. W. T.  
 22118 " Manitoba—H. Laidlaw.  
 22119 " " "  
 12835 " L. Erie shore, Ontario—Capt. J. G. Spain.  
 68 " Nottawasaga, " Mr. Bend, Penetanguishene.  
 24161 " North shore, L. Superior, Ontario—Alfred Willson.

*Plate II.*

- 18180 is from Saskatchewan—G. E. Laidlaw.  
 28141 " Peigan Reserve.  
 29 " York township, Ontario—York Pioneers.  
 28142 " Blood Reserve, N. W. T.  
 69 " Minnesota, U. S. A.  
 25097 " N. W. T.—E. Wilson, Tilsonburg.

*Plate III.*

- 18179 is from Fort Qu'Appelle, N. W. T.—G. E. Laidlaw.  
 88 " Lake Winnipeg, Manitoba—Hon. J. Norquay.  
 25083 " North Dakota, U. S. A.—J. Brown.  
 28 " Nottawasaga, Ontario—Mrs Ed. Beecroft.  
 28143 " Blood Reserve, N. W. T.

Catlinite pipe specimens have also been found as far south as Mississippi and Alabama.

It should be observed that all catlinite pipes are not of Indian make. Many white men have produced pipes of this material for trade purposes, or for their own use, and it is said that at least one fur company found it profitable to manufacture nearly, if not quite, two thousand. As a rule,

it is not very difficult to distinguish the machine made article from the Indian product, but there is little doubt that numerous "White" hand-made specimens pass for Indian.

#### SPINDLE WHORLS.

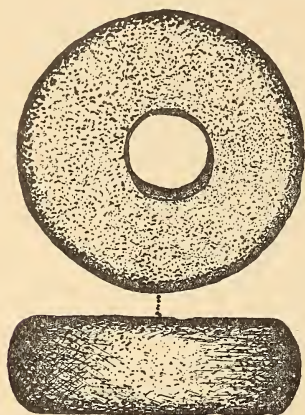


Fig. 3. (28312).

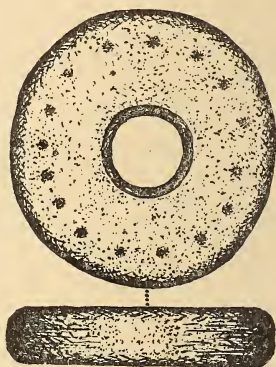


Fig. 4. (28313).

Spindle whorls, like those represented by figures 3 and 4 are common in many parts of the world. These were found by Mr. Matheson, of Canisbay, Caithness, Scotland, and were presented to the Provincial Museum, through his niece, Miss Nicolson, now residing in Edmonton, Alta.

Fig. 3 is perfectly plain, but the other is ornamented on each side with a concentric series of shallow, incised pits or dots. One, of clay, somewhat less in diameter, from Mexico, is ornamented on one of its sides, with a beautifully cut impression of an eagle with outspread wings, but as a rule, objects of this kind are quite plain.

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## STONE CIST.

Anything having even a remote resemblance to a rectangular chamber for any purpose connected with aboriginal burial was almost, if not quite, unheard of in this country until something of the kind was reported to the Provincial Museum by Mr. William Couse, Merchant, of Streetsville, late in the fall of 1906.

As soon as favorable weather came next spring, the place was examined. It lies in a field close to the village, on lot 3, concession 5, Township of Toronto, Peel county, and at a distance of not more than 22 miles from this city.

When Mr. T. M. Edmondson, who owns the property, was cultivating this field, the plough struck some large and solidly fixed limestones, which, on being examined closely with the aid of the spade, were found to be placed edgewise in two rows.

Mr. Edmondson, Mr. W. Couse and Mr. A. W. Cameron, B.A., Principal of the Streetsville High School, all, it need hardly be said, intelligent workers, were kind enough to assist at the reopening of the ground, when I visited the place early in May, 1907. I found that some of the limestone slabs had been removed at the first opening and were lying a short distance from the hole where they had been placed in the cist structure. The stones, however, remaining in position were sufficient (with the explanations given by Messrs. Couse, Cameron and Edmondson) to give a good idea of how the stone chamber was put together. One of its sides was formed of two slabs, the other of three, and each of the ends was closed with one. They all enclosed a space about seven feet long and little more than a foot wide at the bottom (four and a half feet deep) but not more than six or eight inches in width at the top. The difference in width at the top was probably due to outside pressure of the earth, rather than to intention on the part of the cist-makers. There were no cap-stones to this chamber, but the likelihood is that a covering of this kind did exist, lying nearly, if not quite on a level with the surface of the soil, as it must have done, and these stones must have been removed at some time in the early days of cultivation.

As already mentioned, the slabs forming this cist are of limestone. They are quite irregular in form and bear not a mark to indicate any attempt to shape them. On one or two of them glacial striæ appear and on such spots, as a matter of course, the surface is comparatively smooth while the rest of the surface is roughly weathered, bringing out numerous fossil forms, but very obscurely. A few of these resemble *chætetes* of one or more species and one undoubted section of a small crinoid was observed. Similar material forms the banks and bed of the Credit River close by and



Fig. 5.



loose pieces like those used in the building of the cist are numerous in some places on the surface of the soil. Three of the stones were more columnar in shape, with roughly rounded ends uppermost, but these had been removed, and their position in the structure was not clearly noted when the first opening was made. Lengthwise, the cist stands nearly east and west.

There can be no reasonable doubt that the arrangement of the stones was the work of human hands, but for what purpose it is quite impossible to say. At first sight one would naturally look upon it as a grave, unusual as it is to find graves of this kind in Ontario, but failure to find a particle of material suggestive of bone or other animal remains, leaves a supposition of this kind in doubt. It should be noted that there is no stone bottom to the structure, and it may be that had a human body ever been placed in it, the remains have become wholly assimilated with the clay, but this is not at all likely.

We are left, therefore, to surmise at pleasure, as did one gentleman who came to the conclusion that the stones had been placed as they were found to show that some important Indian meeting had been held here; the slabs representing the various tribes, and the pillar-round-topped stones, the witnesses!

Further examination may reveal the names of the tribes, as well as of the witnesses who were present, indicating who acted as president and secretary; the date on which the meeting was held; how many weeks it lasted; the subjects of discussion; when adjournment took place; and the respective numbers of bears, deer, wolves, racoons and other "critters" consumed during the big feast, for, as a matter of course, there was a feast, and, no doubt, many dances too.

The stones are numerous enough, strongly marked enough, and large enough, to contain all such information and even more, if only some one clever enough can be found to read them aright.

Hearty thanks are due to Messrs. Couse, Cameron and Edmondson, for their kind services, in many ways, during the examination of this really unique stone chamber, a structure which introduces to us a wholly new feature in the manners and customs of some of those who occupied this country long ago.

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## ROCK PAINTINGS.

For many years it has been known to the curator that rock paintings existed on Nipigon Bay, but it was only last year that it was found possible to make any examination of them. Accompanied by Mr. C. W. James, Secretary of the Department of Education, the pictographs were found at the base of a precipitous rock, some four or five hundred feet high, on the north side of the bay, about five miles east of Nipigon station on the Canadian Pacific Railway, and probably quite as far from where the bay joins Lake Superior.

Our canoe was managed by the brothers McKirdy, two intelligent young men who know every spot in the neighbourhood, and who thus lost no time in reaching the place.

We landed on a ledge only a few inches above the water, where there was barely room to turn even with difficulty. It seemed almost impossible to reach the level of the paintings only a few feet above our heads, and this, perhaps would have been impossible, but for the agility of Mr. James who made his way to the place, where, with the tape line he succeeded in making all the measurements necessary. These drawings are illustrated on plates IV and V.

They occupied a straggling space about ten feet long, and four or five wide, on a tolerably smooth face of rock.

Nobody pretended to know what they signified. Even the Indians, as has been stated in former reports, do not possess any knowledge of what they mean, and it is utterly vain to make any inquiry on this point.

The dots may represent a number of men, or of any other animals, and one may see a few canoe-forms, the upright strokes standing for human beings; the quadruped may be meant for a bear; the fish-forms for what they look like; the undulating figure for a snake, and so on, but to get a connected story is quite out of the question. One or, at most, two generations, suffice to remove all such knowledge from the primitive man's mind, and when any present day Indian claims to have knowledge of this kind, it should be accepted with some hesitation. It is, however, only fair to state that I have never heard of an Indian claiming to know any more of what the old petroglyphs mean, than we, ourselves, may gather.

Many people are given to the recording of events in some such way. A friend who served against the Boers in South Africa, sends me two photographs of rock drawings at a burial place not far from Kimberley, and these are illustrated on an accompanying page.

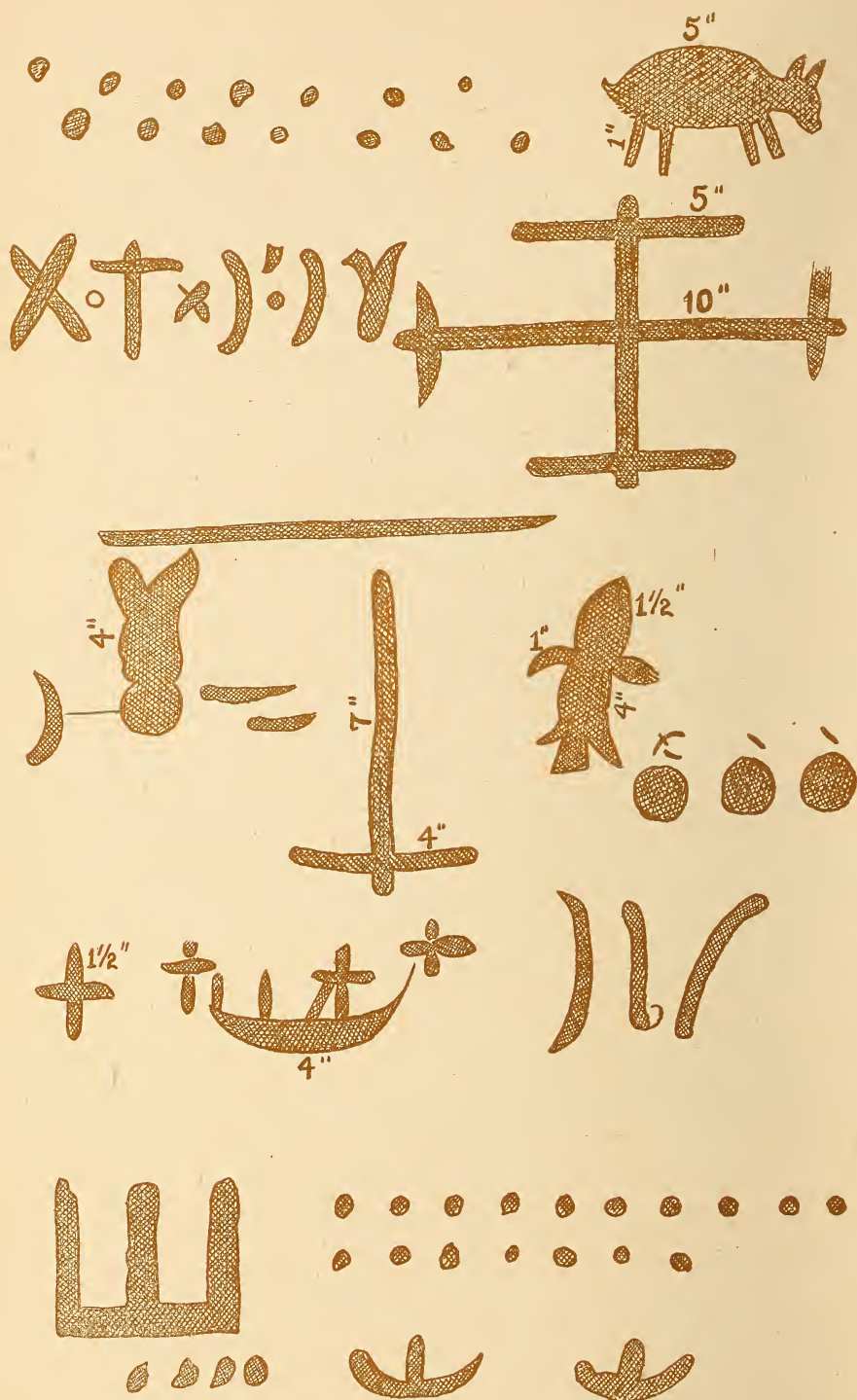


PLATE IV.







Fig. 6.

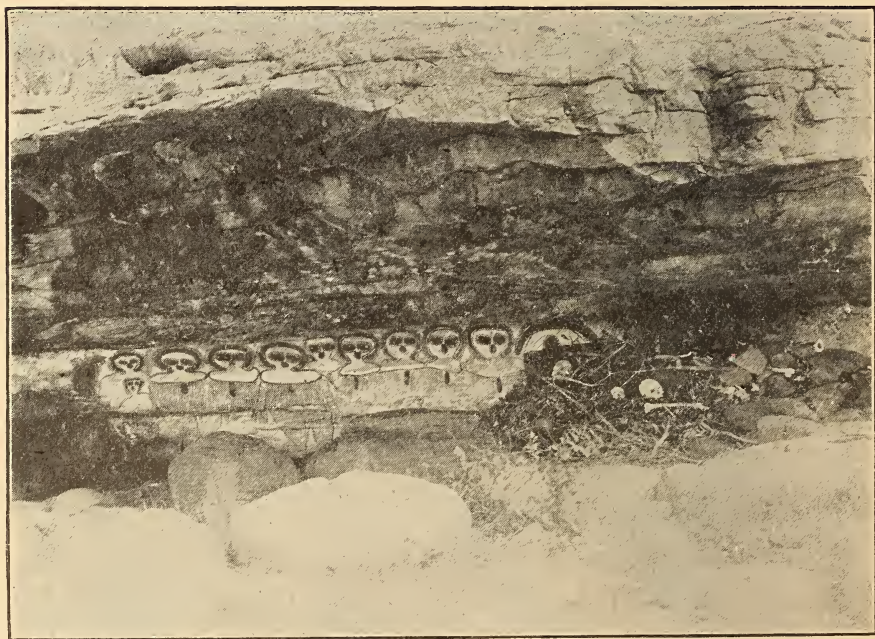
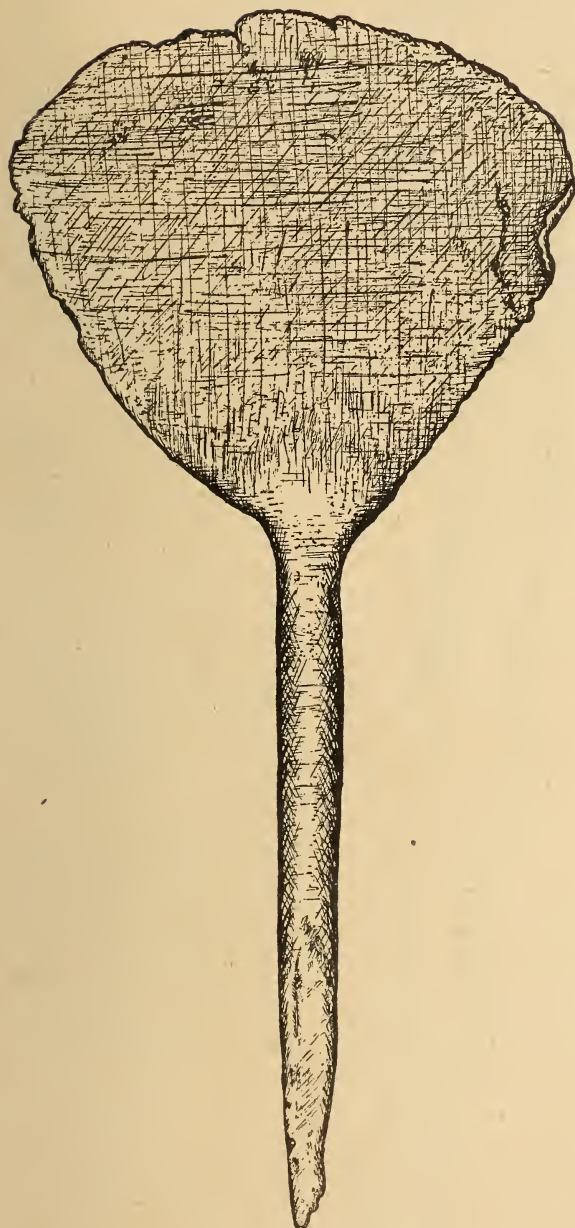


Fig. 7.

Negro Rock Paintings, Kimberley, S. Africa.



## COPPER.



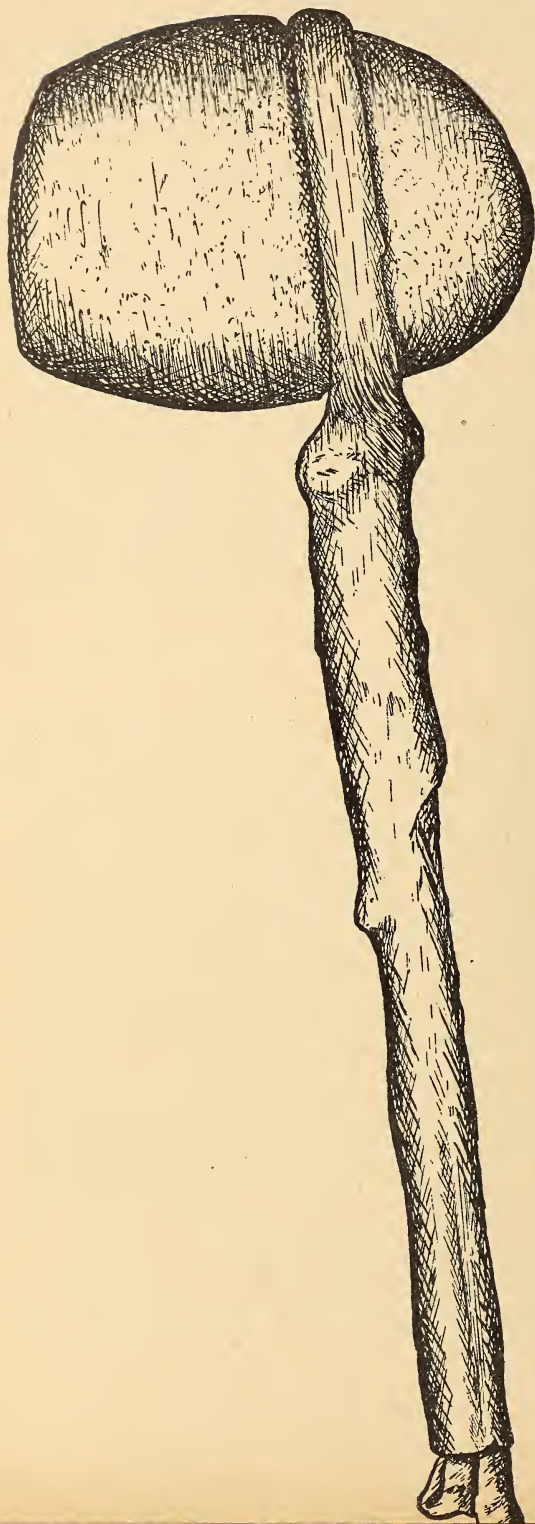
This specimen, figure 8 (28,298), was presented to the Museum by Mr. William McKirdy, Merchant, Nipigon. It was found in a gravel-pit, near Nipigon, and is regarded by him as a sort of scraper.

It is six and a quarter inches long, and, at its widest part, is nearly three inches wide. It may have been used just as it is, or the tine may have been inserted wholly, or only partly into a piece of wood or antler, as it is quite round and smooth, except for an inch and a half at the end where it is somewhat flattened.

Fig. 8. (28,298)



## STONE CLUB OR HAMMER.



The war-club here figured (28,147) is from Mr. G. C. Wright, Kingston, and came from the Blood Indian Reserve, North-West Territory. The handle is not exactly in line with a cross-section of the head, but the tool or weapon must have been a formidable one in the hands of any Indian, whether used in war or in the chase, or in the mere driving of stakes.

The head is of granite, somewhat deeply grooved to receive the shaganapi or rawhide with which the handle is bound.

Figure 10 was found on the prairie near Winnipeg, and was presented by Mrs. Hutton, sen., to the museum.

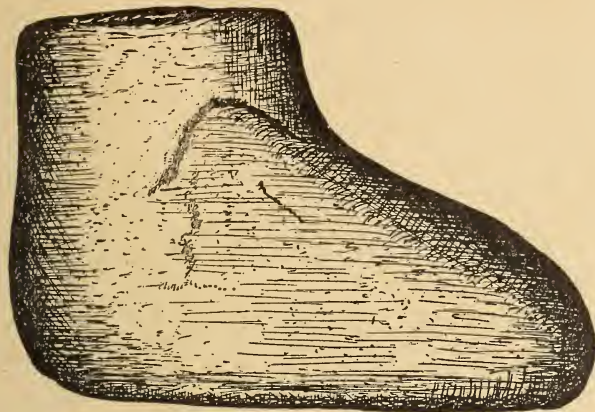


Fig. 10.

Had this specimen been seen by one of the old people it would undoubtedly have been appropriated for the making of a pipe-head. It is very solidly laminated, with a jasperoid appearance, and only requires the boring of two holes to make a serviceable pipe. The Indians were always on the outlook for raw material, the natural shape of which would facilitate the production of any finished

object they wished to make.

The lower side is quite flat, but rough, and without any trace of glaciation.

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#### WILLIAMSBURG.

During the summer a visit was made to the farm of Mr. R. Merkely lot 30. Con. 5, township of Williamsburg, Dundas county. The village situated here had been examined once before in company with Mr. Arthur Brown, Pub. School Inspector for the county.

Mr. Brown seemed to have had a notion that on the occasion in question we had failed to make as thorough an examination as was desirable, and for the purpose of settling all doubts, the second examination was made, but although new ground was broken in several places we did not succeed in adding to our stock of information, further than to show that the burial area was somewhat more extensive than we at first supposed. No relics of any value were found, although evidences of aboriginal occupation were numerous in the form of ashes, fragmentary bones and broken pottery. Mr. Brown has since learned that the proper place to examine is some rods from the spot we dug into the second time.

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## THE USE OF SHELLS BY THE ONTARIO INDIANS.

W. J. WINTERBERG.

NATURE makes many contributions to the wants of man, and of these *shells* figure quite prominently; indeed, scarcely any of the natural productions of North America have commanded more general acceptance than the many species of shells abounding on the sea-shore and in the fresh-water lakes, rivers and streams. In our own Province, of course, very few large shells were available, although the *Unios* (some with beautiful pearly interiors) were, as will be seen from what follows, utilized to some considerable extent, not only in the domestic economy of the Indians, but also in the ornamentation of their persons. The same remark will apply to the univalves as well.

Besides our native shells there are many oceanic species which have found their way hither through the channels of trade, or perhaps as reprisals in warfare. These consist principally of several varieties of conchs, the large *Busycon perversum* (figure *b*, plate XVII) especially, and other smaller species, which will be described more fully under the head of ornaments.

Although they were in common use to the south of us, there is no record of any pearls having been used by the Indians anywhere in Ontario.

## I. SHELL-FISH AS FOOD.

As food is the first requirement of man, we shall also first consider the subject of shell-fish as food. In man's most primitive state his animal food was derived mainly from such species as could most easily be obtained, and we may be sure that among these the mollusks were brought into use first. As Mr. Holmes says, "Weapons or other appliances were not necessary in the capture of mollusks; a stone to break the shell, or one of the massive valves of the shells themselves, sufficed for all purposes."<sup>1</sup>

We would naturally expect to come across allusions to the use of shell-fish for food by the interior tribes in the *Jesuit Relations* or in other early narratives, but in not one of these do we find a single reference. Such references as we do have, relate to species found on the Atlantic coast only. This is all the more surprising when we consider how minutely these early writers went into details of savage life. The use of the land and fresh-water snails also seems to have escaped notice; but when we find that some of these same writers state that the Indians ate snakes, "Grubs, the *Nymphæ* of Wasps, some kinds of *Scarabæi*, *Cicadæ*," locusts, spiders and unmentionable filth and vermin, we must come to the conclusion that snails, being less objectionable than some of the things mentioned, would likewise be eaten.<sup>3</sup>

<sup>1</sup>"Art in Shell of the Ancient Americans." (*Report Bureau of American Ethnology* 1880), p. 188.

<sup>2</sup>Robert Beverly: *The History and Present State of Virginia* (London, 1705), Book III., p. 60.

<sup>3</sup>Since the above was written the following information was received from Dr. A. L. Kroeber, Secretary of the Department of Anthropology, University of California: "The most prominent and conspicuous animal of the snail kind that occurs in the moister parts of California," he says, "is the large yellow, horned slug [*Ariolimax californicus*, evidently], growing to a length of five or six inches. This I know to have been eaten by the Indians of Northwestern California, and I presume by other tribes also. It is said to have been broiled alive on hot stones. A smaller, dark reddish snail, also with horns, and an almost perfectly round flat shell, about an inch and a half in diameter and less than half an inch in height, was also eaten, being prepared in the same way."



Notwithstanding this silence on the part of our early explorers, archæological researches have revealed numerous evidences that most of our shell-fish and even land snails were used as food.

Shell heaps composed of fluviatile species of clams have been found in the interior parts of the country; notably a very large one on the shore of the Concord River, Massachusetts. It was made up almost entirely of shells of *Unio complanatus*, a species which still exists in the river. Ernest Ingersoll,<sup>1</sup> the well-known naturalist, discovered one in Tioga county, New York, but he does not state what species were represented. Dr. Beauchamp informs the writer that he has seen *U. complanatus*, which he says "was the favorite mollusk for food mostly used by the Iroquois," in large beds and small heaps on the Susquehanna. Other *Unio* shells very rarely occur on early Iroquois sites in New York. In Ontario we have a record of only one shell heap, and this is near the Indian mounds at Cameron's Point, in the Rice Lake district. Of this shell heap Mr. Boyle writes: "A little east of the mounds, and now close to the edge of the cliff, there is a quantity of mussel shells, forming a bed from one to ten inches in thickness and seventy-five feet in length. That these were brought here in connection with food purposes there cannot be a doubt, and the Indians of the Alnwick Reserve across the lake explain the presence of so many shells by stating that on one occasion their people would have died of famine but for the plentiful supply of mussels. However this may have been, there are the shells, pointing to an unusually large or long-continued consumption of this kind of food."<sup>2</sup>

We may be sure that most species of mussels native to Ontario figured quite prominently at the aboriginal repast. Of the species represented in the Museum's collection there are: *Unio gibbosus*, *complanatus*, *luteolus*, *rectus*, *ventricosus*, *alatus*, *ligamentinus* and *plicatus*, and *Margaritana costata* and *marginata*. *Anodonta footiana*, *Margaritana rugosa*, and *Unio pressus* were found on village sites in York county.<sup>3</sup> *M. rugosa* is not a native of York.

Of the above species *U. gibbosus* (in Waterloo and Oxford) and *U. complanatus* (somewhat generally distributed) are most abundant. *U. ligamentinus*, also fairly well represented in the collection, seems to be confined to the Thames drainage, and *U. rectus* is peculiar to the Brant district.

And now as to snails, their shells are frequently collected on the sites of our Indian villages, and also have been found in shell-heaps in the United States. In one of these shell-heaps in Maine, explored by Professor Wyman and others, the following species of land snails were discovered: *Helix albolabris*,<sup>4</sup> *Sayii*, *alternata*, *lineata*, *striatella*, *indentata*, *multidentata*, *Zua lubricoides* and *Succinea Totteniana*.<sup>5</sup> The mussel shells having been used as food, and the land snails being present in the same heap, would indicate that they were used for the same purpose. In the shell-heap referred to as discovered by Mr. Ingersoll, "a few land shells

<sup>1</sup>Apud Dr. C. C. Abbott: *Primitive Industry* (Salem, Mass., 1881), p. 442.

<sup>2</sup>*Annual Archæological Report of Ontario* for 1896-7, p. 31.

<sup>3</sup>"Animal Remains found on Indian Village Sites," *Annual Archæological Report* for 1901, page 45.

<sup>4</sup>There is considerable confusion in our scientific nomenclature. The Helicidæ in America being divided into different genera, the shell mentioned is now *Polygyra albolabris*.

<sup>5</sup>*American Naturalist* (Salem, Mass., 1868), Vol. I., p. 566.

(*Helix*) were also seen, but they may have crawled there and died; that is," he says, "I would not care to assume they were eaten by the Indians."<sup>1</sup>

During the course of his exploration of Indian village sites in Oxford and Waterloo, the writer has noted the following species: *Polygyra albolabris*, *dentifaria*, *thyroides*, and *tridentata*, *Pyramidula alternata*, *Omphalina (Zonites) fuliginosus* and *inornatus*. Of water snails there were *Goniobasis livescens*, *Pleurocera subulare*, and *Melantho decisa*, but only the latter may have been used for food purposes. On one village site in Wilmot township were found, between the fragments of a pot, a quantity of carbonized pieces of grass stems and quite a number of shells of *Omphalina fuliginosus*, which seems to indicate that this species was esteemed a choice delicacy. An article in a former report mentions the following shells as occurring in kitchen-middens and débris heaps in York county: *P. albolabris* and *P. palliata*, *Stenotrema monodon*, a species of *Succinea*, *Planorbis trivolvis* and *P. bicarinatus*, *Limnæa stagnalis*, *modicellus*, and *palustris*, *Physa heterostrophæ*, *Melantho decisa*, and *Goniobasis livescens*.

The presence of the shells of the land snails may also be quite accidental, as they occur principally in the subsoil, and therefore may have been brought from the surface by the plow.

All of the above-mentioned species perhaps made welcome variations in the dietary of the Indians. In any event, failing other kinds of food, it is reasonable to suppose that they would finally have recourse to snails; although the Neutrals and Hurons, from what is said of the abundance of all kinds of game in their country, probably were never reduced to want.

We also know almost nothing as to the method of preparing shell-fish for food. Brickell, who is about the only early writer that makes any reference of the kind, says of the mussels: "They are only made use of by the Indians, who eat them after five or six Hours' boiling to make them tender."<sup>2</sup> He also states that some species were dried.<sup>3</sup> The natives of the Atlantic coast, according to Rau, "Used to string these mollusks [*Venus mercenaria*] and to dry them for consumption during winter."<sup>4</sup> These methods may also have been followed by the tribes of the interior.

## II. SHELLS IN THE DOMESTIC ARTS AND MANUFACTURES.

### *Cups.*

Apart from their use as food, perhaps one of the earliest uses to which mollusks were applied was that of domestic utensils. Vessels for holding liquids and also for conveying liquid foods to the mouth are one of the primary requirements of man. Being very conveniently shaped, many of the larger shells formed natural cups. "Haywood, Hakluyt, Tonti, Bartram, Adair and others," writes Holmes, "mention the use of shells for drinking vessels, and," he adds, "in much more recent times Indians are known to have put them to a similar use."<sup>5</sup> According to the old

<sup>1</sup> *Primitive Industry*, opp. cit.

<sup>2</sup> John Brickell: *The Natural History of North Carolina* (Dublin, 1737), p. 249.

<sup>3</sup> *Ibid.*, pp. 288 and 367.

<sup>4</sup> Charles Rau: "Ancient Aboriginal Trade in North America," *Annual Report of Smithsonian Institution* for 1872, p. 379.

<sup>5</sup> P. 193.

Spanish chronicles, Montezuma used cups of "natural shells richly set with jewels." The Indians of Arizona also used large sea shells as drinking vessels.<sup>1</sup>

Father Allouez, in the *Relation* of 1669-70, writing of some of our northern Indians, says: "The savages of this region are more than usually barbarous; they are without ingenuity and do not know how to make even a bark dish or a ladle; they commonly use shells."<sup>2</sup>

There are several large shells of the *Busycon perversum* in the Museum, from which the interior columns have been skilfully removed, and these, we have no reason to doubt, were used as vessels for culinary purposes. There is also a smaller specimen which may have served as a cup, and this we present in figure *a*, plate vi. It has a small perforation through the lip.

These shell cups even formed the prototypes of some vessels of clay, found in the South, of which Thurston gives two illustrations in his *Antiquities of Tennessee*.<sup>3</sup>

### Spoons.

Some species of shells were also commonly used as spoons. Benjamin Thompson refers to this use in the prologue to his *New England's Crisis*, (1676):

"The times wherein Old Pompion was a saint,  
When men fared hardly, yet without complaint,  
On vilest cates, the dainty Indian maize,  
Was eat with clamp shells out of wooden trays."

Beverly, too, informs us that the Indians of Virginia used large cockle-shell spoons. He observes, in language more quaint than elegant perhaps, that "The Spoons which they eat with, do generally hold half a pint: and they laugh at the *English* for using small ones, which they must be forc'd to carry so often to their Mouths, that their Arms are in danger of being tir'd before their Belly."<sup>4</sup> According to Hoffman, the Menomini Indians formerly used mussel-shells as spoons, and they were in use even up to recent years, when necessity demanded.<sup>5</sup> Schoolcraft also mentions their use for this purpose.<sup>6</sup>

Many of our own fresh-water bivalves are admirably adapted for the purpose, the half-shells being used in the unaltered state. Of these there are in the Provincial Museum *Unio luteolus*, *U. complanatus*, *Margaritana marginata*, *U. ligamentinus*, *U. ventricosus*, and *U. alatus*. Among them there is a right valve of *U. luteolus*, which is very much discolored, and looks as if it had contained some oily substance. It and a left valve of *U. complanatus* (also showing oily discolorations) were taken from a grave near Old Fort Ste. Marie, in Simcoe County.

In Tennessee and Kentucky *Unio* shells were cut so as to form a handle on one side. Special attention must be called to the interesting fact that these shells were nearly all made from left valves, which, as Holmes says, "Gives such a position to the handle that they are most conveniently used by the right hand, thus indicating right-handedness on the part of these

<sup>1</sup> *Antiquities of Tennessee*, p. 309.

<sup>2</sup> Burrows' Edition of the *Jesuit Relations* (Cleveland, Ohio), Vol. 54, p. 207.

<sup>3</sup> P. 311.

<sup>4</sup> *History of Virginia*, Book III., p. 17.

<sup>5</sup> The Menomini Indians, *Fourteenth Annual Report Bureau of Ethnology*, p. 257.

<sup>6</sup> *History, Condition and Prospects of the Indians of the United States* (Philadelphia, 1857), Vol. 6, p. 109.



people.”<sup>1</sup> He states that there are only two left-handed specimens in the U. S. National Museum. Professor Putnam finds that over thirty examples in the Peabody Museum are so shaped as to be used by the right hand.<sup>2</sup> We cannot be certain as to how many of the *Unios* in the Museum were, if at all, used as spoons, and, consequently, also, whether they had been intended for use with the right or left hand. This is all the more difficult to determine, owing to the fact that none of them has been altered in any way. Both valves of some species could be held equally well, and perhaps used just as conveniently too, with either hand.

### *Knives.*

Among the many economic uses of shells is that of cutting instruments. The sharp-edged *Unios* and *Anodontas* no doubt were often made to perform this office, for it is reasonable to suppose that if cutting was done with flint or chert knives (often with dull edges) shells could be made to cut just as readily. Indeed, in some of the accounts of the Indians given by early writers, we find allusions to shell knives. Kalm, writing of the Indians of New Jersey, says: “Instead of *knives* they were satisfied with little sharp pieces of flint or quartz, or else some other hard kind of stone, or with a sharp shell, or with a piece of bone which they had sharpened.”<sup>3</sup> Henry Hudson, speaking of some Indians he met during his first voyage, and the preparations they made to entertain him, says: “They likewise killed a fat dog and skinned it in great haste with shells which they had got out of the water.”<sup>4</sup> The last part of this reads as if the knives had been hastily improvised—in fact, had just been taken from the water for the purpose. Beverly states that before the Virginia Indians were supplied with metallic tools “Their Knives were either Sharpened Reeds or Shells, and their Axes sharp Stones bound to the end of a Stick, and glued in with Turpentine. By the help of these they made their Bows of the Locust tree.”<sup>5</sup> The Menomimi Indians used clam-shell knives.<sup>6</sup>

“A number of authors mention the use of shells as scalping knives.”<sup>7</sup> And in Bressani’s *Relation* (1653), we read of shells being used in torturing a prisoner. “To cut off Guillaume’s right forefinger,” he says, “a barbarian used, not a knife, but a shell, like a saw; which could not cut the tough and slippery sinews; and therefore he tore it off by sheer force.”<sup>8</sup> Strachey asserts that when Powhatan “would punish any notorious enemye or trespasser, he caused him to be tyed to a tree, and with muscle-shells or reedes the executioner cutteth off his joints one after another, ever casting what is cut of into the fier; then doth he proceede with shells and reedes to case the skyn from his head and face.”<sup>9</sup>

Another interesting reference to the use of shell knives, which occurs in Brickell’s *The Natural History of North Carolina*, may be mentioned.

<sup>1</sup> “Art in Shell,” p. 199.

<sup>2</sup> *Eleventh Annual Report Peabody Museum*, p. 295; footnote.

<sup>3</sup> *Travels into North America* (London, 1771), Vol. II., p. 39.

<sup>4</sup> De Laet’s “Discovery of the New Netherlands,” quoting Hudson’s narrative; *Collections of the New York Historical Society* (Second Series, 1841), Vol. I., p. 300.

<sup>5</sup> *History of Virginia*, Book III., p. 60.

<sup>6</sup> Hoffman, *opp. cit.*, p. 257.

<sup>7</sup> Holmes: “Art in Shell.”

<sup>8</sup> Burrows’ Edition, Vol. 37, p. 195. Father Isaac Joques in the *Relation* of 1647, also says: “They, [the Iroquois] used a scallop or an oyster-shell for cutting off the right thumb of the other Frenchman, to cause him more pain.” (Vol. 31, p. 45.)

<sup>9</sup> *The Historie of Travaile into Virginia Britannia*, etc. (Hakluyt Society, London 1849). P. 52.

It is as follows: "They cut the Arms of the young Girls with sharp *Shells* of *Fishes*, 'till the Blood follows, which they cast into the Air, with loud Shreeks and Cries."<sup>1</sup> This was done at one of their ceremonial feasts.

It is said that the Indians of Vancouver's Island still carve their wooden sepulchral images with knives made of shell.

Professor Holmes figures a perforated valve of *Unio gibbosus*,<sup>2</sup> probably used as a knife or scraper, from Tennessee. Specimens of *U. complanatus*, similarly perforated, are to be seen in the Laidlaw collection from Victoria county. There are no less than nine of these with holes through the sides, and all still retaining their sharp edges. These may have been utilized as cutting tools, the holes perhaps serving for the attachment of handles, although these were really not necessary.

#### *Razors and Tweezers.*

Another and a more novel use to which these clam shells may have been put, although we have no direct evidence that the Ontario Indians used them in this way, is that of razors for cutting off or of tweezers for pulling out the hair. We know that among some savages, *e.g.*, the Fiji Islanders, sharp clam shells were used as razors, and some of the early explorers of the Atlantic coast of America make mention of a similar employment of shells. Thus, Strachey, writing of the Virginia Indians, says: "The men shave their hair on the right side very close, keeping a ridge comonly on the toppe or crowne, like a coxcomb; for their women, with two shells, will grate away the haire into any fashion they please."<sup>3</sup> A more painful process was to pluck the hair out by the roots, using two valves of a clam as tweezers. Adair says that among the Choctaws "both sexes pluck all the hair off their bodies, with a kind of tweezers, made formerly of clam-shells."<sup>4</sup> The Virginia Indians, according to Beverly, "pull their Beards up by the roots with a Muscle-shell; and both Men and Women do the same by the other parts of their Body for Cleanliness sake."<sup>5</sup> And, coming nearer home, Heckewelder says of the Pennsylvania Indians: "Before the Europeans came into the country, their apparatus for performing this work, consisted of a pair of muscle shells, sharpened on a gritty stone, which answered very well, being somewhat like pincers."<sup>6</sup> With these they not only pulled out the hair of their beards but of their foreheads also.

#### *In Pottery Making.*

Most of our *Unios* seem to have been employed in the manufacture of pottery both as smoothers and scrapers; at least there is no other aboriginal industrial art to which we could assign implements like figures *a*, *b*, *c*, *d* and *e*, plate VII.

The first two of these figures represent shells used as "slicks" for smoothing the inside of clay vessels while in a plastic state, much in the same way as certain smooth stones were employed by the Indians of southern California. Figure *a* is a right valve of *Unio alatus*, which was used until

<sup>1</sup> P. 334.

<sup>2</sup> Figure I., Pl. XXVII., "Art in Shell."

<sup>3</sup> Strachey, *opp. cit.*, p. 66.

<sup>4</sup> *History of the American Indians*, etc. (London, 1775), p. 6.

<sup>5</sup> *History of Virginia*, Book III., p. 2. (See also Captain Smith's, "The General History of Virginia, New England and the Summer Isles."; *Pinkerton's Voyages*, Vol. 13, p. 34.)

<sup>6</sup> "History, Manners and Customs of the Indian Nations, who once inhabited Pennsylvania," etc., *Pennsylvania Historical Society Memoirs* (Philadelphia, 1881), Vol. 12, p. 205.

a large hole appeared in the side. It appears to have been held in the right hand while in use. This specimen is fully  $4\frac{1}{2}$  inches long. It was obtained near Brantford, in Brant county. In figure *b* we have a left valve of the same species, found on a village site in Eldon township, Victoria county. It was employed in the same way, a large part of the surface of the shell having been brought into play, and it shows evidence of being used with the left hand. The posterior portion is cut away; but this may also be the result of long service as a scraper.

Besides these, the Museum collection includes specimens of *U. ventricosus*, *U. complanatus*, *U. gibbosus*, *U. plicatus* and *U. ligamentinus*, all of which were similarly employed. Some of them offer evidence of left-handedness. There are eleven left valves of which only five were used with the right hand; and thirteen right valves, six of them being used with the left hand; two could have been held in either hand, and the remaining five were most conveniently held with the right. It is among the scrapers, however, that we find the most evidence of right-handedness.

Figures *c*, *d* and *e*, plate VII., represent shells probably used as scrapers in smoothing and otherwise shaping the interior and exterior portions of clay pots. The sharp points may have been serviceable in forming the sharp angles of the overhanging rims. These sharpened portions are always on the posterior ends of the shell, and were not made so designedly, but are the result of continual use—the gritty nature of the tempering material, commonly used in pottery, accounting for the wearing away of the shell. There are also some that are not pointed; the posterior and anterior ends and lower edges having been brought into play; these portions being rounded and worn from long use. A fragment (apparently of *U. luteolus* or *Margaritana costata*), in the writer's collection, is worn down almost to the pallial impression. Pieces of *M. rugosa* were found in Whitchurch township, York county, which may have been used as scraping tools.

Many of these specimens show that their users were right-handed. In figure *c*, plate VII., we have one which was held in the left hand. It is a right valve of *U. rectus*,  $3\frac{1}{2}$  inches long, and comes from Fairchild's creek, near Brantford. Figure *d* represents a smaller one of the same species, but this is a left valve, used with the right hand. A right valve of *U. ligamentinus* is shown in figure *e*. It is not so sharply pointed as are some others made of this species; in fact, only the lower edge was utilized, and it was held in the left hand. This specimen was found near Clearville, in Orford township, Kent County. Including these, there are in the collection eight right valves used with the left, and thirteen left valves used with the right hand. There is only one left valve intended for use with the left hand, and this is a fragment of *U. gibbosus*, in the writer's collection. Two other shells, a right and left valve, could have been held in either hand. The fact that when a left valve was utilized it was held in the right hand, and *vice versa*, might be taken as an indication of ambidexterity on the part of the users.

The utilization of finely pulverized shell as a tempering material for pottery must also be mentioned here. Dumont in his *Historical Memoirs of Louisiana*, says "that, having amassed the proper kind of clay and carefully cleaned it, the Indian women (of Louisiana) take shells, which they pound and reduce to a fine powder; they mix this powder with the clay, and, having poured some water on the mass, they knead it with their hands and feet, and make it into a paste."<sup>1</sup>

<sup>1</sup> Dumont's *Memoirs* (1753) Vol. II., p. 271; *apud* Thurston.



There are several pottery fragments in the Museum in which this tempering material was used ; but, as Mr. Boyle says, " Our Indians used burnt gneiss and granite even more frequently than shells " <sup>1</sup> for this purpose. The clay of which pipes are made undoubtedly contains a good deal of this shell tempering material.

### *In Tanning.*

The *Unio* shells were also very well adapted for use in tanning. We know that other shells were often employed for the purpose ; Brickel, for instance, mentions oyster shells. With these they worked the skins until they were dry, " by which means," he says, " they became soft and pliable. " <sup>2</sup> Hoffman states that mussel-shells are " sometimes used for scraping deerskin in tanning. " <sup>3</sup>

### *As Scrapers in Woodworking.*

Another probable use is that of scrapers for smoothing bows and the shafts of arrows, and for hollowing out the wooden canoes. Strachey tells us that the bows of the Virginia Indians " are of some young plant, eyther of the locust-tree or of weech, which they bring to the forme of ours by the scraping of a shell. " <sup>4</sup>

There is in the Museum a piece of *Unio* shell (figure *a*, plate VIII.), from Brant county, provided with a rounded notch which is quite sharp edged and slightly bevelled. If this is not an accidental fracture, and we are inclined to think that it is not (the specimen is a little weathered, thus obliterating traces of use), it may have been put to some practical use—perhaps for scraping arrow-shafts, for which purpose it is well adapted.

The author just quoted, <sup>5</sup> Saavedra, <sup>6</sup> Kalm, <sup>7</sup> Smith, <sup>8</sup> Hariot <sup>9</sup> and Wood mention the use of shell-scrapers in the manufacture of wooden boats. The latter gives an interesting account, which is as follows: " Their *Cannows* be made either of Pine-trees, which, before they were acquainted with *English* tooles, they burned hollow, scraping them smooth with Clam-shels and Oyster-shels, cutting their out-sides with stone-hatchets. " <sup>10</sup> Hariot says that the Virginia Indians first took off " the barke with certayne shells. "

### *Fish Hooks.*

" The use of shell in the manufacture of fishing implements, " says Professor Holmes, " seems to have been almost unknown among the tribes of the Atlantic Coast, and with the exception of a few pendant-like objects, resembling plummets or sinkers of stone, nothing has been obtained from the ancient burial mounds of the Mississippi valley. "

<sup>1</sup> David Boyle : *Notes on Primitive Man in Ontario*, p. 28.

<sup>2</sup> *The Natural History of Carolina*, p. 365.

<sup>3</sup> " The Menomimi Indians, " p. 257.

<sup>4</sup> P. 105. See also Capt. John Smith's account, *Pinkerton's Voyages*, Vol. 13, p. 35.

<sup>5</sup> P. 75.

<sup>6</sup> *Apud* Prof. Fritz Schultze : " Origin of the Culinary Art, " in *Kosmos* (1878.)

<sup>7</sup> *Travels into North America*, Vol. II., p. 38.

<sup>8</sup> *Opp. cit.*, p. 35.

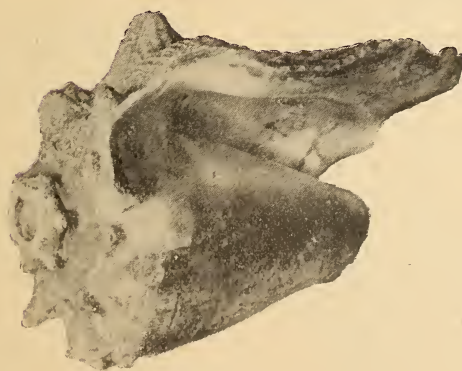
<sup>9</sup> *The True Pictures and Fashions of the People in that Parte of America Now called Virginia*, " etc. (Quaritch reprint, London, 1893.)

<sup>10</sup> *New England's Prospect* (published by the Prince Society, Boston, 1865), p. 102.





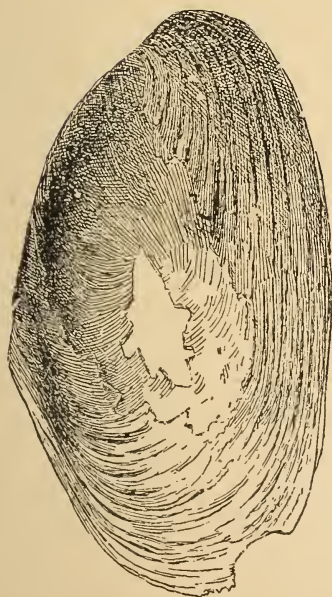
*a.* Shell Cup.



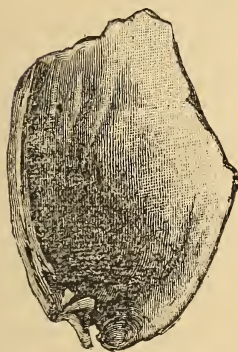
*b.* Shell Trumpet.



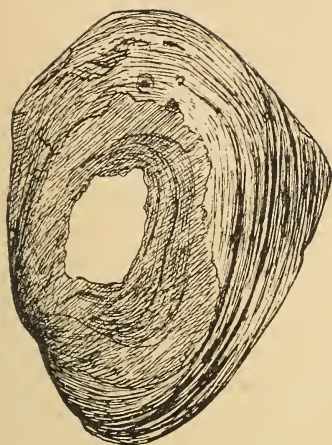




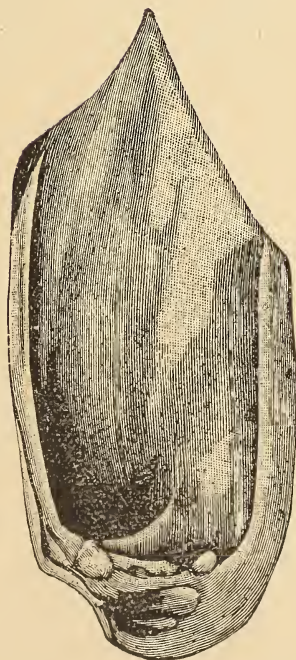
a.



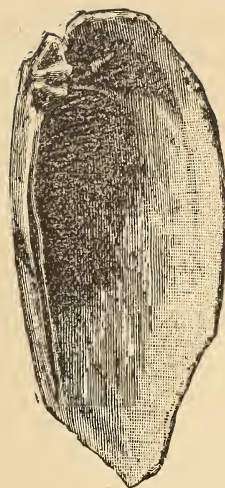
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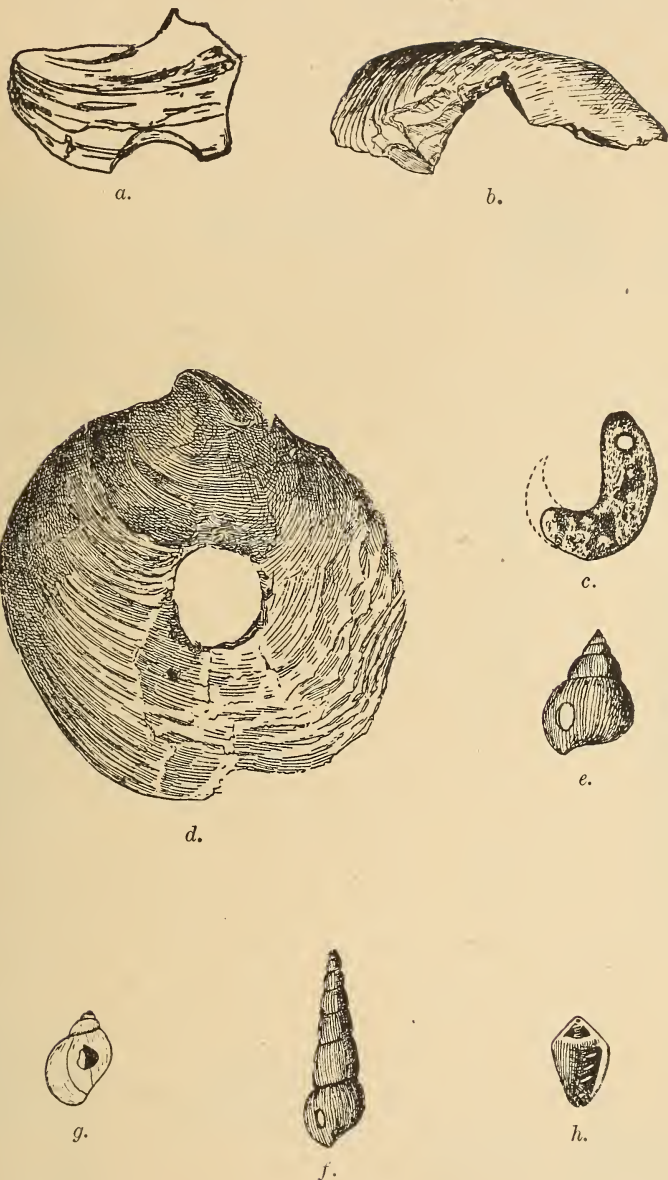


e.

UNIO SHELL POLISHERS AND SCRAPERS.







SHELL IMPLEMENTS AND BEADS.

- a. Shell scraper.
- b. Shell implement (*U. gibbosus*).
- c. Fish hook (?)
- d. Unio shell hoe from Ohio.
- e. Bead (*Melantho decisa*).
- f. Bead (*Pleurocera subulare*).
- g. Bead (*Limnæa catascopium*).
- h. Bead (*Marginella conoidalis*).





a.



b.



c.



d.



e.



f.



j.



i.



k.



g.



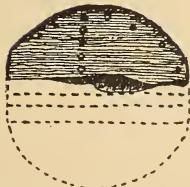
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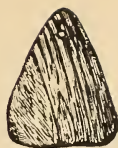
SHELL BEADS.







a.



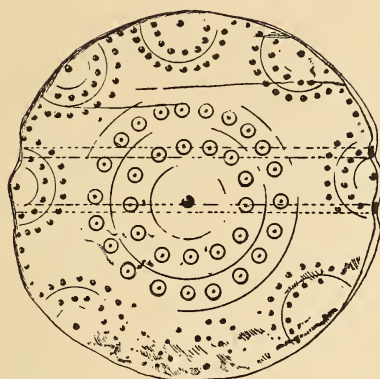
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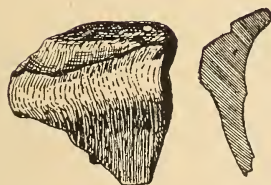
g.



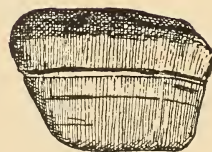
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k.

PENDANTS.

a, b, g, h, from unio shell.  
c, d, f, i, j, k, from conch shell.  
e. Large form of "runtee" bead.







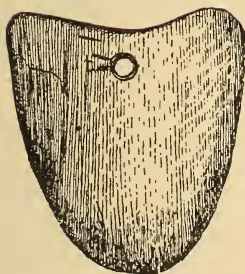
a.



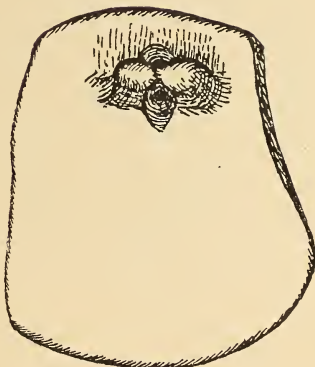
c.



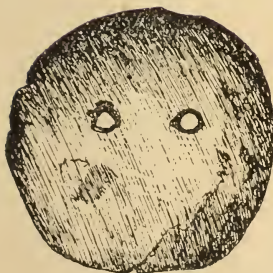
b.



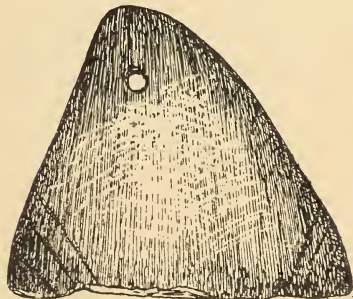
d.



e.



g.



f.

PENDANTS AND GORGETS.





a.



b.



c.



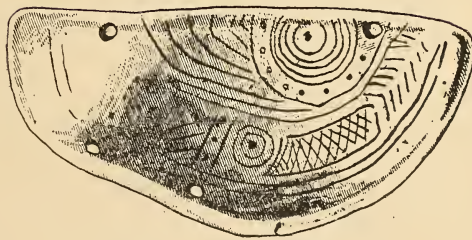
d.



e.



g.



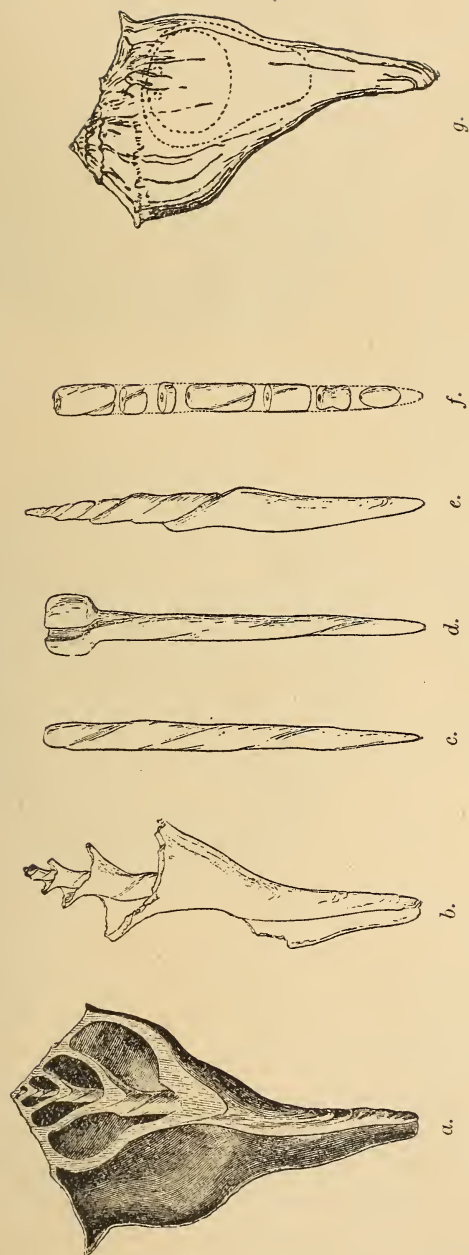
f.

SHELL ORNAMENTS.

- a, b. Perforated shells of *Fulgur perversum*.  
 c. Perforated shell of *Fulgur pyrum* (?).  
 d. Perforated shell of *Strombus* (sp.?).  
 e. "Rattlesnake" shell gorget from Tennessee.  
 f. "Rattlesnake" shell gorget from Ontario.  
 g. Shell "pin."







SHOWING THE DERIVATION OF SHELL OBJECTS FROM BUSYCON SHELL.  
(After Holmes' Plate XXIX).

*a.* Showing the interior of shell.

*b.* The columella.

*c.* Roughly dressed pin derived from columella.

*d.* Completed pin.

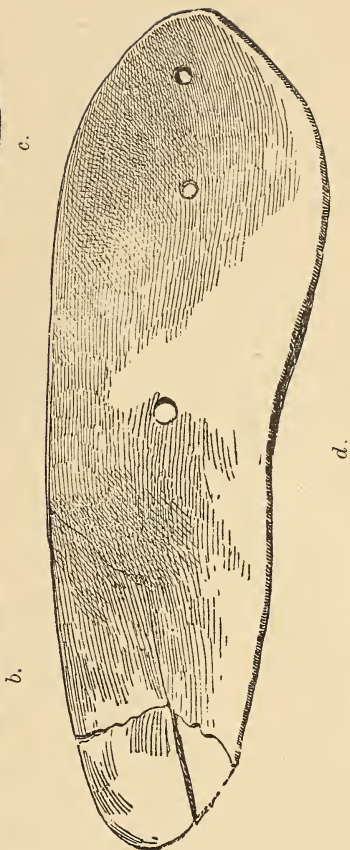
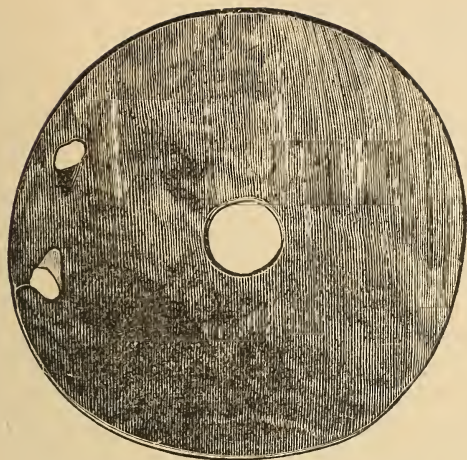
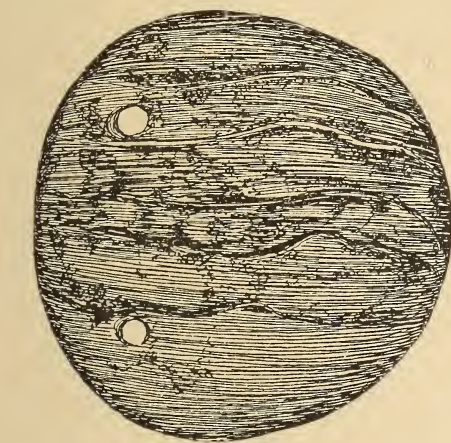
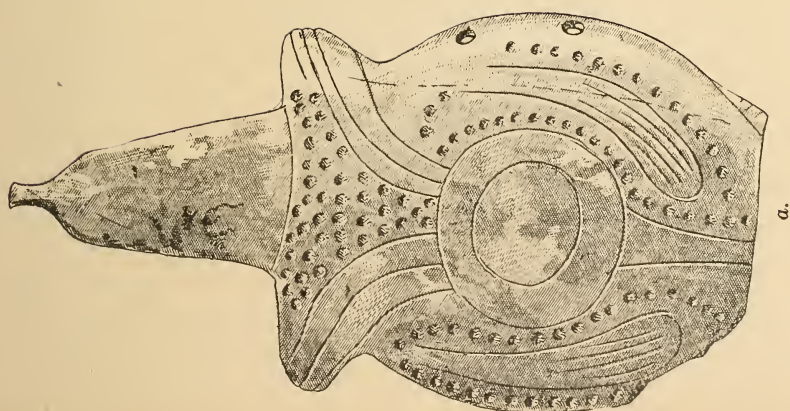
*e.* Pin pointed at both ends.

*f.* Illustrates the manner of dividing the cylinders into sections for beads.

*g.* Shows derivation of shell breast-plates or gorgets.

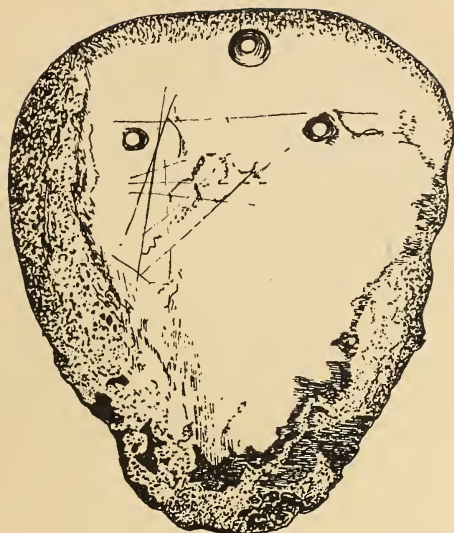




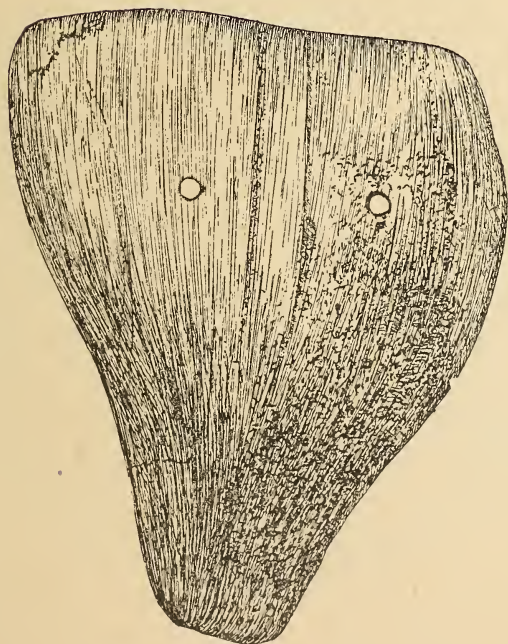


SHELL GORGETS.





*a.*

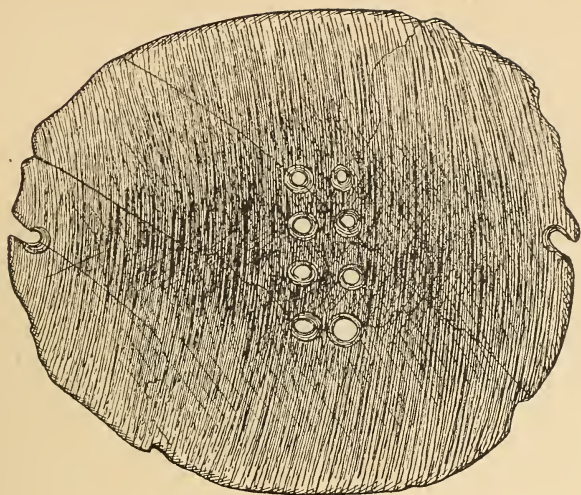


*b.*

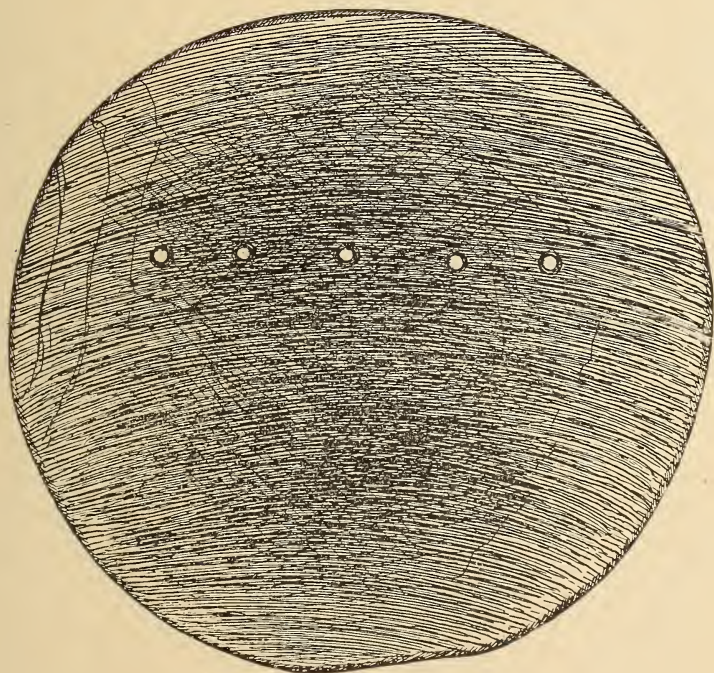
SHELL GORGETS.







a.

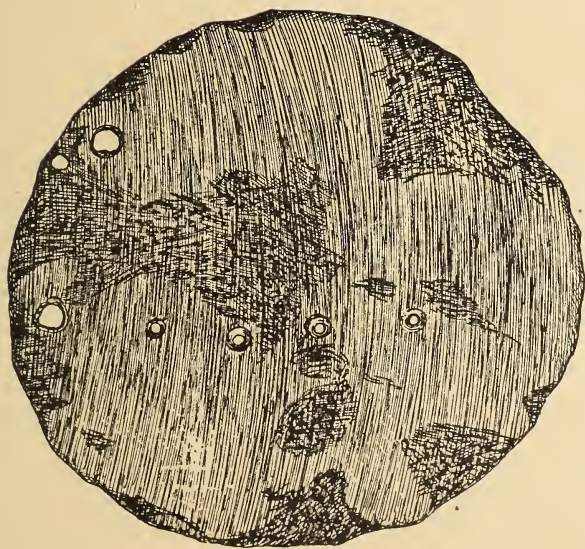


b.

SHELL GORGETS OR BREAST-PLATES.

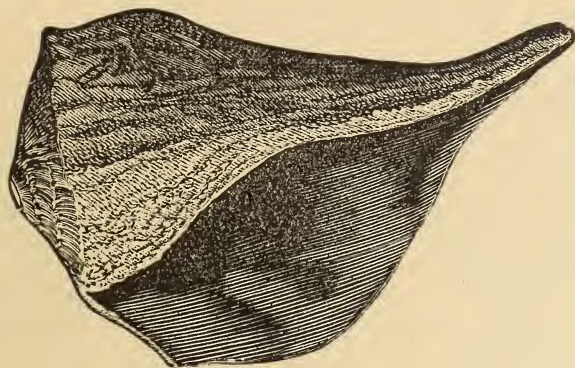






a. Shell Gorget.

SHELL OBJECTS.



b. Shell of *Busycos perversum*.





a.



b.



c.



d.

a. Necklace, from Lafitau, showing manner of wearing gorgets.

b.

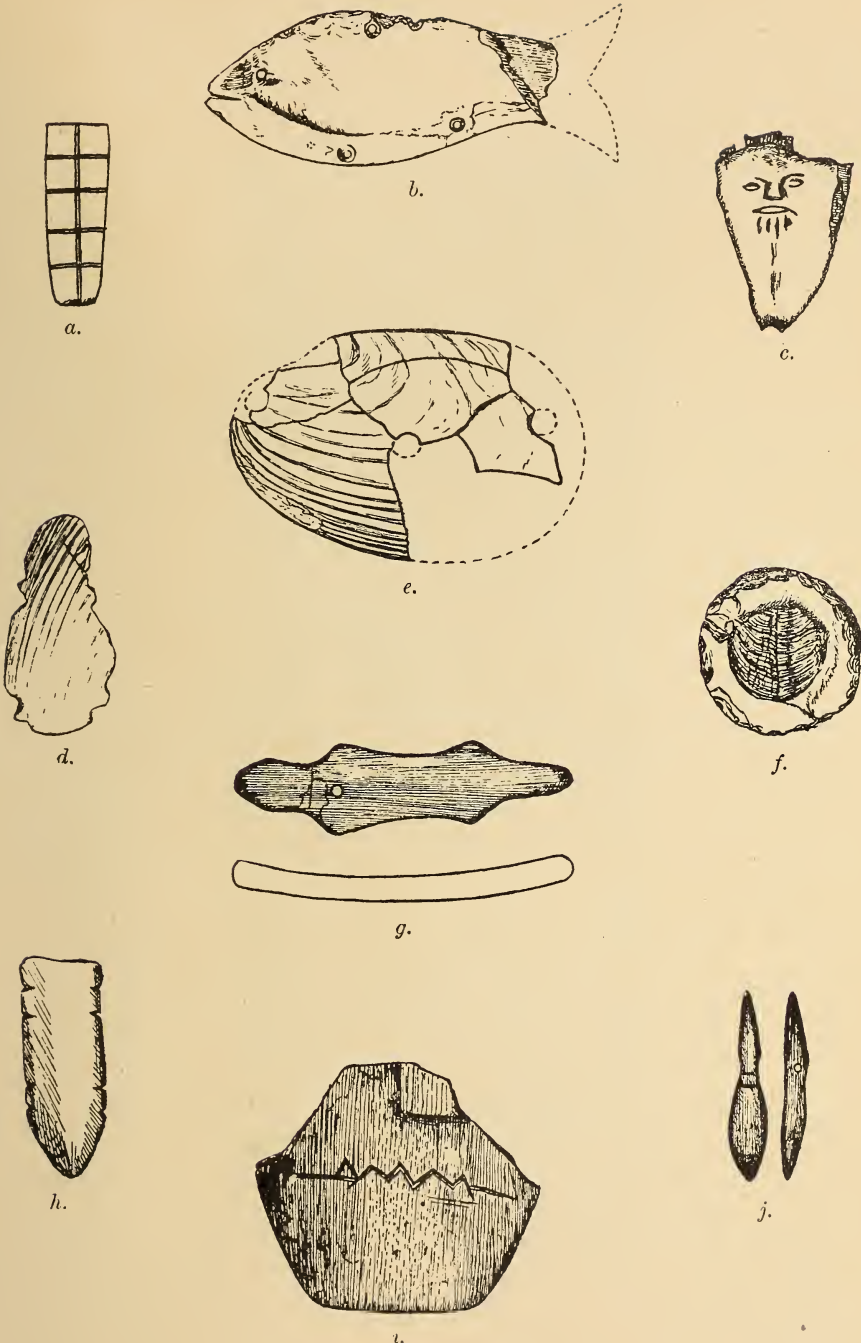
c. Indian boy with necklace of "Runtie" beads, from Beverly.

d. Necklace, from Beverly, showing manner of wearing breast-plates.

a, b and c are after Holmes' Plates XLV. and XXXVI.



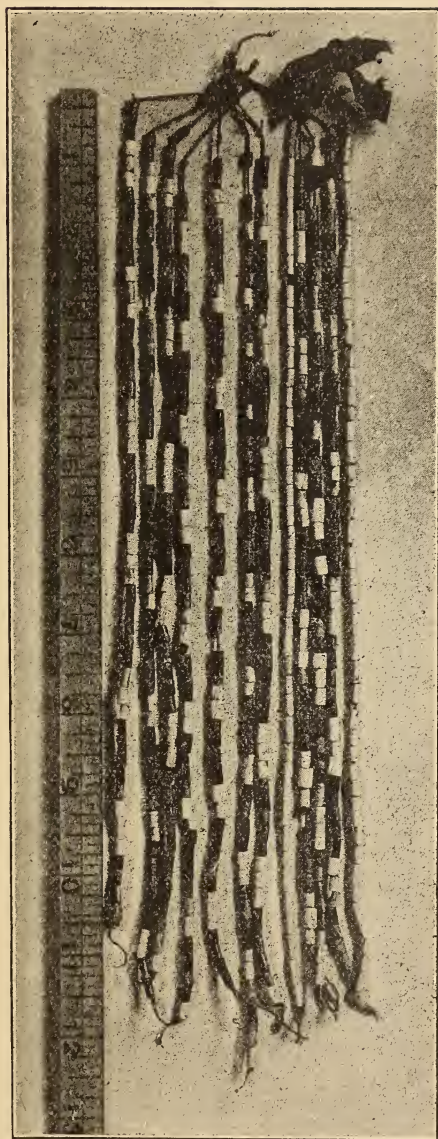




ORNAMENTS MADE OF SHELL.







WAMPUM STRINGS.



Bone fish hooks have been found in Ontario, so there is no reason why they should not also be made of shell. In figure *c*, plate VIII., we have a specimen which, if we may judge from its shape, was used as a fish hook; although it may also be only a mere whimsical form of pendant ornament. Similar hooks are said to be used by some tribes to secure the ends of strings of beads.<sup>2</sup> This specimen is made of a piece of tropical shell in which exfoliation has commenced, and it is now very fragile. Its proportions are: length,  $\frac{1\frac{1}{8}}{16}$  of an inch; width,  $\frac{9}{16}$ , and it is about  $\frac{1}{16}$  thick. The point seems to have been much longer; we have supplied a conjectural restoration. This interesting object comes from lot 10, concession 3, Onondaga township, Brant county.

### *Shell Trumpets.*

The classic story of Triton, the trumpeter of Old Neptune, blowing through a shell to produce the roaring of the waves, mythic fancy though it was, nevertheless seems to show that the ancients knew that certain shells (especially the genus named after the above-named fabled demi-god), by removing the tip of the whorl, made excellent trumpets. It is well known that among the savage cannibals of the far-distant Pacific Islands, shells were used to call the warriors to battle. And even not so very long ago many a New England laborer was summoned to dinner from the distant hay-field by the deep, metallic note emitted by one of these primitive instruments. The Indians, likewise, made use of shell trumpets. Bartram says: "On one and the same day, early in the morning, the whole town is summoned by the sound of a conch-shell, from the mouth of the overseer, to meet in the public square."<sup>3</sup> Professor Wyman, from whose article this interesting quotation was obtained, adds that this was "for the purpose of entering upon the work of cultivating the soil."<sup>4</sup>

The latter writer figures a conch-shell with a large hole in the side, which he thinks may have been a trumpet similar to the one referred to by Bartram.<sup>5</sup>

Another allusion to the use of a conch-shell trumpet by the Indians, occurs in the *Pennsylvania Archives*. Dr. Beauchamp, in a letter to the writer, mentions this reference. He says: "Shell trumpets were not used by the N. Y. Indians in early days—at least not in the interior, but there is a record of their use in 1791. Col. Proctor was at the Upper Cornplanter, then called New Arrow's town by some—on the Alleghany River—and said: 'April 19th—O'Beel and chiefs arrived here from the lower town, and ordered their conch-shell to be sounded through the village, to summon the head men into council.'<sup>6</sup>

"This was unusual, however, and at Buffalo Creek, May 15th, 1791, he said, 'the alarm gun was fired, which was the signal to call their head men into council.' At that time the Onondagas here were called together by the horn of *Kakiktoto*. At an earlier day, after the flight of the French colony, the bell was taken to Onondaga, and used to call meetings for state and church. The earlier mode, when their towns were compact, was to call meetings or make proclamations by the town crier."

<sup>1</sup>"Art in Shell," p. 208.

<sup>2</sup>*Ibid.*, p. 209.

<sup>3</sup>*Travels in Florida* (Philadelphia, 1791), p. 512.

<sup>4</sup>"Fresh-water Shell-Heaps of St. John's River, East Florida," *American Naturalist*, Vol. II. (1869), p. 453.

<sup>5</sup>*Ibid.*, plate X.

<sup>6</sup>*Pennsylvania Archives*, 2nd Series, Vol. 4, p. 577.



In figure *b*, plate vi., we have a shell of the Giant Conch (*Strombus gigas*), which was, up to the time when it was acquired by the Provincial Museum, used by the Senecas of the Six Nations Indian reserve, in Brant county, to call the people to the Long House. The tip of the shell has been removed to form the mouth-piece. It is said that the notes produced could be heard at a distance of nearly two miles; but, however this may be, we have not yet seen any one who could produce a sound approaching this in volume. Other than forming the mouthpiece the shell has not been altered—the breaks shown on the lip being the result of accident.

#### *Other Utilities.*

We have no record of any shell hoes being used by the Ontario aborigines, although Wood<sup>1</sup> and other writers<sup>2</sup> mention their use in the New England States. Neither have we any shell specimens that could have been utilized for the purpose. In Ohio perforated shells of *U. plicatus* (figure *d* on plate viii. shows one of these in our cases) were used, and of this species several were found in Ontario; but not one of them is provided with a hole for the attachment of a handle; in fact, the specimens we have, are, with one exception, mere fragments.

The writer found several tools made of *U. gibbosus*, like figure *b*, plate viii., on two prehistoric village sites in Waterloo county. At first sight they appear to be the mere result of an adventitious fracture, but we are quite positive that they were made in the course of some mechanical operation, whatever it may have been. The example illustrated is a right valve, and was first used as a pottery smoother. The notch appears to have been made so by design, but what utility there could have been in this we can only conjecture; that it had a purpose, however, can not be denied. We have a smaller specimen (No. 24,168 in the writer's collection) in which the notch is more rounded and the edges also are slightly polished, as if it had been used for smoothing purposes.

In the *Jesuit Relations*<sup>3</sup> mention is made of arrowheads of shell, but no objects of the kind, fashioned from this material, have been found in Ontario.

We will now pass on to the consideration of

### III. SHELLS USED AS ORNAMENTS.

The love of ornament manifests itself in the lowest stages of human development, and in the gratification of this taste shells were extensively used the world over. Our own aborigines, influenced by the same natural appreciation of the beautiful, were also not slow to recognize the utility of shells in personal adornment.

Shell was also probably a favorite material on account of being a product of the sea. Primitive man everywhere regarded the sea as a magnificent display of the power of their chief deity, and so it was also quite natural for them to regard the shells rolled up from its depths as bearing a part of the mysterious power of this deity. The peculiar roaring sound made by sea-shells when held to the ear was likewise a great mystery to them, and increased the reverence with which shells were

<sup>1</sup> *New England's Prospect*, p. 106.

<sup>2</sup> *Mass. Historical Society Collections*, Vol. VII., p. 193.

<sup>3</sup> Vol. 15, p. 245.

regarded by most inland tribes. In fact, "we find no Indian tribe," as Kohl says, "however deep it might dwell in the interior, of which the first Europeans did not mention their high respect for sea-shells."<sup>1</sup> He attempts to account for this reverence in this wise: "There is no doubt, I think, that historic reminiscences are connected with this shell worship—recollections of that great water from which the ancestors of the Indians and the founders of their religion probably stepped on shore."<sup>2</sup> According to Long, the Omaha Indians had in their possession, about three-quarters of a century ago, a large shell which had already been transmitted from generation to generation, and to which they paid a great deal of veneration. It was considered so sacred that a skin lodge or temple was appropriated for its preservation. In this lodge a person charged with the care of it resided constantly. It was never allowed to touch the earth, and any one who impiously set eyes on it became blind. This shell was always taken along on their national hunting expeditions, and it was also consulted as an oracle.<sup>3</sup> The shells of *Busycon perversum*, on account of being sinistral, *i.e.*, having the mouth aperture turned to the left, no doubt were also regarded as sacred. Indeed, Dr. Wilson thinks they "closely corresponded to the *Conopas*, or rude Penates of the Peruvians, as described by Rivero and Von Tschudi,"<sup>4</sup> which were, as were the *Busycons*, buried with their owners.

It is quite natural to suppose that any ornament made of sea-shell would likewise be invested with mystic and protective powers, and would be worn primarily as an ornament or charm, and finally, perhaps, losing this significance, the wearing of it for purely decorative purposes became more general; just as much of the jewellery of the civilized races of to-day was once supposed to exert a talismanic influence.

Having a supposed remedial efficacy would also result in some species being used for amulets or charms, ornamental in character. "The most peculiar Commodity belonging to this Country," says an old writer, "is a Kind of Shell-Fish, call'd *Esurngny*, extraordinary white, and of singular Virtue for stenching of Blood; for which end they make Bracelets of them; not only for their own Use, but to vend of others."<sup>5</sup> Cartier, also, who first makes mention of this *esurngny*, and whose words we present in the quaint phraseology of the translator Hakluyt, says:—"Of them they make beads, and use them even as we doe gold and silver, accounting it the precioussest thing in the world. They have this vertue in them, they will stop or stanch bleeding at the nose, for we proved it."<sup>6</sup>

The Indians were very fond of loading themselves with all sorts of ornaments. Wood, speaking of the Indians of New England, says: "Although they be thus poore, yet is there in them the sparkes of naturall pride, which appears in their longing desire after many kinds of ornaments, wearing pendants in their eares, as formes of birds, beasts, and fishes carved out of bone, shels, and stone, with long bracelets of their curious Wampompeag and Mowhackees, which they put about their necks and loynes."<sup>7</sup> William Penn, in a letter written to his friends in England,

<sup>1</sup> *Kitchi Gami* (London, 1860), p. 136.

<sup>2</sup> *Ibid.*

<sup>3</sup> Long, *Expedition from Pittsburg to the Rocky Mountains*, etc. (London, 1823), Vol. II., p. 47; *apud* Rau.

<sup>4</sup> "Some Ethnological Aspects of Conchology," *The Canadian Journal* (Second series, 1858), Vol. III., p. 406.

<sup>5</sup> *The Four Kings of Canada* (London, 1710), reprinted, London, 1891.

<sup>6</sup> Quoted by Dawson, *Fossil Men* (Montreal, 1880), p. 32.

<sup>7</sup> *New England's Prospect*, p. 74.

says: "They wore ear-rings and nose-jewels; bracelets on their arms and legs, rings on their fingers, necklaces made of highly polished shells found in their rivers and on their coasts. The females tied up their hair behind, worked bands round their heads, and ornamented them with shells and feathers, and wore strings of beads round several parts of their bodies. Round their mocasins they had shells and turkey spurs, to tinkle like little bells as they walked."<sup>1</sup>

Describing the decorations of the Hurons, Father François du Peron states: "Around their necks and arms bead necklaces and bracelets of porcelain; they also suspend these from their ears, and around their locks of hair."<sup>2</sup> Several other writers mention the latter custom, *i. e.* of decorating the hair.<sup>3</sup>

The custom of suspending ornaments from the lobe of the ear was a common one; but in the *Relation* of 1657-58 (Vol. 44, p. 289), it is stated that "Not only the lobe of the ear is pierced, but also the cartilage or rim, which the women are wont to hang with bits of shell called porcelain." The Abnaki Indians, according to the *Relation* of 1652-53, "wore sticks of wampum in their ears, which are pierced with such very large holes as easily to receive a great stick of Spanish wax."<sup>4</sup> Loskiel tells us that "Some Indians bore a hole through the cartilage of the nose, and wear a large pearl, or a piece of silver, gold, or wampum in it,"<sup>5</sup> and this practice is also referred to in the quotation from Penn, given above.

Besides gratifying their personal vanity by the use of bracelets, necklaces, etc., some Indians wore a sort of crown, composed of shell-beads. "The People of Condition of both Sexes," says Beverly, "wear a sort of Coronet on their Heads, from 4 to 6 inches broad, open at the top, and composed of Peak or Beads, or else of both interwoven together, and workt into figures, made by a nice mixture of the Colours."<sup>6</sup> Evidence is not wanting of the use of similar head-dresses among the Iroquois and our Canadian Indians. Brébeuf, in a letter to Le Jeune, speaks of an Iroquois prisoner among the Hurons who "was dressed in a beautiful beaver robe and wore a string of porcelain beads around his neck, and another in the form of a crown around his head."<sup>7</sup> Le Jeune,<sup>8</sup> himself, speaks of a Canadian Indian who "went to France and was very well received by his Majesty, at whose feet he laid his crown of Porcelain beads, as a sign that he recognized that great Prince, in the name of all these nations as their true and lawful monarch."

### *Beads.*

These were the most common kind of ornaments among some tribes. Father Rasles, writing of the Abnaki Indians (in 1723), says: "If you wish to see him in all his finery, you will find he has no other ornaments

<sup>1</sup> Quoted by Israel Worsley, *A View of the American Indians*, etc. (London, 1828), pp. 65-66.

<sup>2</sup> *Relation* of 1638-39, Vol. 15, p. 155.

<sup>3</sup> Loskiel, *History of the Mission of the United Brethren among the Indians of North America* (London, 1794), p. 48; *Relation* of 1657-58, Vol. 44, p. 287; Father Nau's *Relation*, Vol. 68, p. 265, and Vol. 70, p. 95; and Beverly, Book III., p. 2.

<sup>4</sup> Vol. 40, p. 207 (Burrows Ed.)

<sup>5</sup> Loskiel, p. 49.

<sup>6</sup> *History and Present State of Virginia*, B. III., p. 2. In plate 3 Beverly shows an Indian wearing one of these "Coronets," and on plate 5 is a young woman with the same head-gear.

<sup>7</sup> Le Jeune's *Relation*, Vol. 13, p. 39.

<sup>8</sup> *Ibid.*, Vol. 15, p. 223.



but beads.”<sup>1</sup> The Indians were sometimes most lavish in the use of these objects. In the *Relation* of 1644–45 we read of Kiotseaeton, an Iroquois Indian who had come to negotiate peace with the French, as being “almost completely covered with Porcelain beads.”<sup>2</sup> According to Dawson, Champlain says “the Huron girls accumulated strings of wampum for their dowry, and lavishly adorned themselves with it on occasions of festivity.”<sup>3</sup>

Enormous quantities of beads have been found in graves and mounds. In the Grave Creek mound of Virginia, for instance, between three and four thousand were discovered. Professor Holmes, commenting on this find, says: “This number will, however, appear very insignificant when compared with a collection such as the costume of the great King Philip could have furnished. Drake,” he says, “relates that Philip had a coat ‘made all of wampameag,’ which, when in need of money, he ‘cuts to pieces, and distributes it plentifully among the Nipmoog sachems and others as well to the eastward as southward, and all round about.’”<sup>4</sup> By adding to this store of beads the contents of two belts, one of which was nine inches in breadth, and so long that when placed upon the shoulders it reached to the ankles, we conclude that the greatest collection ever taken from a prehistoric mound could not compare for a moment with the treasure of this one historic chieftain.”<sup>5</sup>

Mr. Matson, on page 129 of the *Ohio Centennial Report*, “describes four skeletons, on each of which shell beads were found. In three cases they had been placed about the neck only; in the fourth, nearly thirty yards of beads had been used. There were four strands about the neck, crossing over on the breast and back and passing down between the legs. Strings passed down the legs to the feet, and were also found along the arms and around the wrists.”<sup>6</sup> It is not evident whether these beads were worn, arranged in the way described, during life; they may only have been placed so before burial. It was a common custom to bury all valuable possessions with their dead owner, and Le Jeune mentions the practice of even putting bracelets of beads on the bones of the dead before the communal burial in ossuaries.<sup>7</sup>

On the neck of a skeleton in the Princess mound, Rice Lake, Mr. Boyle found 865 discoidal beads, which appeared to have been in several strings. In the same mound there were also 300 beads made of *Marginella conoidalis*, arranged in two strings.

The wearing of bead necklaces, as was observed by one of the Jesuit Fathers, was “more common among men than among women.”<sup>8</sup>

The simplest ornaments consisted of entire shells, not altered in any way, except that they were pierced for stringing. For this purpose both land and fresh-water species were freely utilized; beads fashioned of whole shells being perhaps the most common objects of the kind found in Ontario.

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<sup>1</sup> Kip: *Jesuit Missions*, p. 25; *apud* Holmes, p. 231.

<sup>2</sup> Vol. 27, p. 247.

<sup>3</sup> *Fossil Men*, p. 140.

<sup>4</sup> Drake: *Book of the Indians*, p. 27.

<sup>5</sup> “Art in Shell,” p. 234.

<sup>6</sup> *Ibid.*, p. 231.

<sup>7</sup> Le Jeune's *Relation*, Vol. 10, p. 293.

<sup>8</sup> *Journal of the Jesuit Fathers* in 1658, Vol. 44, p. 291.

6 ARCH.

Perforated shells of *Melantho decisa*,<sup>1</sup> (figure *e*, plate VIII.), one of the largest and heaviest of our fluviatile univalves, abound. These shell-beads are known to occur on village sites in the Counties of Waterloo, Oxford, Brant, York, Victoria and Simcoe; and they are also met with in the kitchen-middens of Central and Western New York. They may have been worn as among the Virginia Indians, described by Strachey, who says they wore "sometymes divers kinds of shells, hanging loose by small purfleets or threeds, that, being shaken as they move, they might make a certaine murmuring or whisteling noise by gathering wynd, in which they seeme to take great jollity, and hold yt a kind of bravery."<sup>2</sup>

Another species frequently found is *Pleurocera subulare* (figure *f*, plate VIII.), a native of the Great Lakes. This is likewise pierced through the lip. Waterworn specimens of this shell, perforated in precisely the same way, but quite adventitiously and by wholly natural means, were collected by the writer on the shore of Lake Erie; and we have seen some from Indian camps which have every appearance of having been such shells appropriated by the Indians merely because they were already provided with a suspension hole. Such accidentally perforated ones, one would think, suggested the idea of piercing those that were *not* perforated, just as Holmes says, "Perforations which occur naturally in some species of shell would be produced artificially."<sup>3</sup> The New York Indians used these shells for a similar purpose; several specimens in the museum of the Buffalo Academy of Sciences being obtained from kitchen-middens in the western part of the State. The Provincial Museum contains examples from the following localities: Waterloo, Oxford, Brant, and Victoria counties. Many of these specimens (especially those from Oxford and Waterloo) come from prehistoric sites.

*Goniobasis livescens* (the *Melania livescens* of the older conchologists) is another fresh-water shell, resembling the species just described, although it is not quite so large. It is also frequently perforated for use as a shell-bead, or, perhaps, as an ear ornament; for the Canadian Indians, according to the *Jesuit Relations*,<sup>4</sup> used shells for this purpose. This species is not so commonly met with as the *Melantho* and *Pleurocera*. Ash beds and débris heaps in the following counties in Ontario have yielded specimens: Brant, Oxford, York and Waterloo. Dr. Beauchamp has collected this species and *G. depygis* in Central New York.

Shells of *Planorbis trivolvis* have been found, "rubbed smooth and polished by long use as ornaments," in refuse heaps in York County. *P. bicarinatus*, a smaller species with, as its specific name implies, two sharp ridges revolving on the whorls of the shell, "in the same condition as is the last," were likewise collected. In addition to these are mentioned several land snails, such as *Polygyra palliata*, "polished by long use as an ornament;" *Stenotrema monodon* (a species about half the size of *palliata*) "from Old Fort, Whitchurch, in which a hole has been made

<sup>1</sup> The writer has a specimen with two holes—one in the usual place and the other higher up in the spire; but the remarkable feature about this example is that there are apparent evidences of reparative growth subsequent to the piercing of the lower hole, showing that the animal lived for some time after the operation; for it is well known that most mollusks have the power of repairing their shells when they are injured. No explanation can be offered as to the probable reason for this double perforation, except, possibly, to kill the animal, or to facilitate its removal from the shell.

<sup>2</sup> *The Historie of Travaile into Virginia Britannia*, etc., p. 67.

<sup>3</sup> "Art in Shell," p. 188.

<sup>4</sup> Vol. 1, p. 281.

through the centre of the spire.”<sup>1</sup> The writer himself has occasionally picked up the prettily mottled shells of *Pyramidula alternata*, while searching for relics, and on one occasion found several with a hole passing through from the apex to the umbilicus. This hole may also have been made by accident recently, for the shells are very fragile.

In Mr. Laidlaw's collection there are three pierced shells of *Limnæa catascopium* from Victoria county, one of which we illustrate (figure *g*, plate VIII.) The walls of this particular specimen are much heavier than those of recent shells of this species, especially those found inland. Several shells of *L. palustris*, worn and polished, with holes within the lip, were collected in York county.

On a village site in Waterloo county the writer picked up a broken valve of the small species of bivalve known as *Sphærium striatinum*, which had been pierced with a hole. This specimen, unfortunately, was lost. It is the first record of this species being used for ornamental purposes.

Dawson, in his *Fossil Men*, mentions a necklace “composed in part of shells of *Purpura lapillus* from the distant coast of New England, and in part of rude beads of native copper from Lake Superior,” which were found in a grave at Brockville, Ontario. The Indians of Newfoundland also strung these shells for beads and ornaments.

There is a little shell quite commonly used as a bead, and this is *Marginella conoidalis* (figure *h*, plate VIII.) It is a marine species, and has the apex ground down until a hole appeared. This shell has been discovered in different localities in Ontario, and is frequently met with in some parts of the United States.

A perforated shell of *Natica duplicata*, in the Museum, was discovered in a gravel pit near the town of Simcoe, in Norfolk county. When found it and a bone needle were still united by a strand of hair. This species is oceanic.

There is also a string of *Olivella oryza* shells, from York county, in the Provincial collection.

Beads made from pieces of the larger tropical shells are more numerous than those just described. The flat discoidal forms are derived from the solid columellæ (see figures *f*, plate XIII.), and there are also some from the parietal portions. There are in the Museum several almost spherical specimens from Onondaga township, Brant county. Others are cylindrical and from one to two and three or more inches in length, and varying from about  $\frac{3}{16}$  to  $\frac{3}{4}$  of an inch in diameter. One bead of this kind, from Brant county, is made of the columella of a large conch and is over  $6\frac{1}{8}$  inches long. This is evidently the kind of bead referred to by Adair, when he says: “Formerly four deer-skins was the price of a large conch-shell bead, about the length and thickness of a man's fore-finger; which they fixed to the crown of their head as an high ornament—so greatly they valued them.”<sup>2</sup>

Figure *a*, plate IX., shows the only known example of a discoidal bead made of *Unio* shell obtained from a prehistoric site in Ontario. It seems to be derived from *U. luteolus*, the thickest *Unio* found in the part of the country where this specimen was found, namely, in North Dumfries township, Waterloo county. This specimen is a little more than  $\frac{3}{4}$  of an inch in diameter and  $\frac{3}{16}$  thick. It retains the pearly nacre of the fresh shell. If the prehistoric Neutrals knew anything about wampum this one no doubt would be regarded as such.

<sup>1</sup> Ontario Archaeological Report for 1901, pp. 46-47.

<sup>2</sup> The History of the American Indians, p. 170.



The small shell-bead shaped like a truncated pyramid represented in figure *b*, plate ix., comes from York township. It is made of a piece of one of the large conchs. Its proportions are  $\frac{7}{16}$  by  $\frac{5}{16}$  of an inch, and is about  $\frac{7}{16}$  of an inch high. The hole at the bottom is round, while at the top it is oval or almost quadrangular.

In figure *c*, plate ix., we have one of the most remarkable shell-beads in the Provincial collection. It was found on lot 19, concession 3, London township, Middlesex county. It is only about  $\frac{1}{2}$  inch long and nearly as wide.

We have another unique form of bead represented in figure *f*, plate ix. The end view shows the curious shape of this specimen. Its length is  $\frac{3}{4}$  of an inch. The hole was drilled from both ends, the perforations meeting near the middle. It comes from Nottawasaga township, Simcoe county.

A curious bead, made from the rostrum or beak of a conch shell, is shown in figure *d*, plate ix. The hole was bored through the rounded columella, and the natural canal and a portion of the lip was retained. It is a little more than  $1\frac{1}{8}$  inches long, and 1 inch wide. This is the only specimen of the kind that we have ever seen. It comes from Onondaga township, Brant county.

Figure *e*, plate ix., shows a rude bead made from an unsymmetrical piece of shell, which comes from Nottawasaga township. It appears to have been a fragment of another piece which likewise was provided with a hole, a portion of which is retained. It was afterwards re-bored. The lamellar structure is shown on one side. It is  $\frac{3}{4}$  of an inch long, and about  $\frac{3}{8}$  square.

The cylindrical bead from Beverly township, Wentworth county, shown in figure *g*, plate ix., is another peculiar specimen. The holes are bored somewhat like those in bird amulets. First a hole was drilled in at the end to the depth of about  $\frac{7}{8}$  of an inch, and a lateral hole was bored to meet this. Both holes are now broken. At the end where the hole is most badly broken an attempt was made to pierce it from the opposite side. It is about  $1\frac{5}{8}$  inches long, and  $\frac{1}{4}$  of an inch in diameter.

A similar bead, except that the holes go entirely through, and which also comes from Beverly township, is shown in figure *h*, on the same plate. It is made from the internal column of a tropical shell, the spiral groove of which is still retained. The holes are a little more than  $\frac{1}{8}$  of an inch in diameter, and were drilled from both sides, the perforations meeting in the middle. It is  $2\frac{1}{4}$  inches long, and nearly  $\frac{1}{2}$  of an inch thick.

Our collection also includes numerous examples of what are called runtees, which are thus described by Beverly: "These are either like an Oval Bead, and drill'd the length of the Oval, or else they are circular and flat, almost an inch over, and one-third of an inch thick, and drill'd edge-ways."<sup>1</sup> He gives an illustration of an Indian boy who is described as wearing a necklace of runtees. Figure *c*, plate xviii., is Holmes' copy (figure 5, plate xxxvi.) of a portion of Beverly's engraving.

Figure *i*, plate ix., shows a common form of runtee bead from a mound near Port Colborne. It is  $1\frac{1}{4}$  inch long,  $\frac{7}{8}$  wide and  $\frac{3}{16}$  thick.

A rude, heavy bead, triangular in cross-section, which comes from lot 34, concession 7, Beverly township, is shown in figure *j*, on plate ix. It is  $1\frac{3}{8}$  of an inch long and  $\frac{3}{4}$  wide. There are several of a similar shape in the Museum; also some flattened, rectangular pieces of approximately the same size.

<sup>1</sup> *History of Virginia*, Book III., p. 59.

The bead shown in figure *k*, plate ix., comes from a prehistoric site in Waterloo county, and is the only bead of this type ever found on a village site in that part of the Province, although it is only a short distance from sites (in Brant county) yielding numerous objects made from tropical shells. The hole was bored from end to end and is of uniform diameter throughout. The proportions of this bead are :—length,  $\frac{1}{16}$  of an inch ; width,  $\frac{5}{8}$  ; thickness,  $\frac{3}{16}$  of an inch. It is still quite smooth and polished, and in appearance is almost like porcelain. One side is slightly concave and the other is convex.

A unique form of runtee bead is illustrated in figure *l*, plate ix., which was obtained from a mound at Port Colborne. The hole is not bored through from end to end, but was made in the same way as the holes in bird amulets, the lateral hole being bored to meet the one drilled lengthwise from the middle of the end. Mr Boyle says of this specimen : “Shell-beads bored in this way are by no means common, if we may judge from the fact that the specimen figured here is the only one that has come into our possession since the Ontario archæological collection was begun, twenty-one years ago.”<sup>1</sup> This specimen is much decayed, exposing the lamellar structure of the shell. The darker portions shown in the figure are a dull red in the specimen. It is roughly circular or orbicular in outline, and is  $1\frac{3}{8}$  inches in diameter and nearly  $\frac{3}{8}$  thick.

In figure *m*, plate ix., we have a somewhat different style of runtee, also made of sea-shell. A portion of this specimen is missing, but it evidently was provided with two perforations, a portion of one of which still remains, as is indicated in the figure. The only attempt at decoration is a row of circular depressions along the edge and across the middle. This specimen must have been worn a considerable length of time as some of these depressions are almost, in fact some of them are, entirely effaced. Professor Holmes figures (fig. 3, plate xxxvi.) a specimen somewhat similarly decorated, which comes from New Mexico and is now in the U.S. National Museum. As in Holmes' figure, our specimen may also have had a line crossing the other, forming a cross. The width of this specimen is a little more than  $\frac{7}{8}$  of an inch, so this must have been its general diameter when whole. It is  $\frac{3}{16}$  of an inch thick. This specimen comes from Nottawasaga township, Simcoe county.

The specimen shown in figure *e*, plate x., which may also have been a gorget, is a flat piece of tropical shell, over 2 inches in diameter. It is thus described by Mr. Boyle in the *Archæological Report* for 1897 : “The three concentric circles in the middle and the arcs on the margin have been described from central points by means of something answering the purpose of compasses, as have also the smaller circles surrounding the dots. The pattern has been carefully laid out, and quite as accurately worked out. Although not more than  $\frac{1}{8}$  of an inch in thickness on the edge, and about  $\frac{3}{16}$  in the middle, two holes having a diameter of two millimeters are bored from edge to edge, as shown by the dotted lines, which are not on the specimen itself. The extremities of the holes bear evidence of much wear.” This fine specimen comes from near Penetanguishene, Simcoe county. Some years ago a somewhat similar one was found in a grave near the Humber river, in York county.

<sup>1</sup> *Annual Archæological Report* for 1906, p. 32.

*Pendants.*

Some of these were no doubt attached as auxiliary ornaments to the larger gorgets of shell.

Figures *a* and *b* on plate x., represent two "ear drops" or pendants of *Unio* shell, from Nottawasaga township, Simcoe county. They still retain the pearly coloring of the natural shell, and in figure *a*, the pallial impression remains. The holes in both specimens are only about  $\frac{1}{8\frac{1}{2}}$  of an inch in diameter. The larger specimen is  $1\frac{1}{8}$  inches long and  $\frac{1}{16}$  wide; while the other is  $\frac{1}{16}$  of an inch long and  $\frac{3}{4}$  of an inch wide, and they are not more than  $\frac{1}{8}$  of an inch thick.

A small pear-shaped pendant or "ear-drop" made of conch shell, obtained from a grave on lot 10, concession 3, Onondaga township, is shown in figure *c*, plate x. Its proportions are: length,  $\frac{7}{8}$  of an inch; width,  $\frac{5}{8}$ , and it is a little more than  $\frac{1}{8}$  of an inch thick.

Figures *g* and *h*, plate x., are from Brant county, and are both made of *Unio* shell. Figure *h* is a little more than  $\frac{7}{8}$  of an inch long,  $\frac{1}{2}$  inch wide, and  $\frac{1}{16}$  thick. The other is a little smaller and has a square perforation. It measures  $\frac{9}{16}$  of an inch in length and is  $\frac{7}{16}$  wide.

The concavo-convex, irregularly shaped pendant represented in figure *d*, plate x., comes from Onondaga township. It is in poor condition owing to decay. The proportions of this specimen are: length,  $1\frac{5}{8}$  inches; width,  $\frac{5}{8}$  of an inch.

A pendant ornament with two holes is shown in figure *k*, plate x. It seems to have been made from a small conch. The upper portion is triangular in cross-section. The length of this specimen is  $1\frac{1}{4}$  inches and its width is about  $\frac{3}{4}$  of an inch. This object is also considerably decayed. It comes from Onondaga township.

Figure *f*, plate x., represents another form of pendant from a grave in Onondaga township. The greater part being like soft chalk, considerable portions have broken away. It is  $1\frac{3}{4}$  inches long, and  $\frac{1}{2}$  of an inch wide.

Figures *i* and *j*, plate x., are made from the parietal portions of a small conch. Figure *j*, has a deep groove cut across the side shown; and this, no doubt, was done to separate the perforated part from the lower portion. Below this groove there is another incised line. Both specimens come from Beverly township and their respective proportions are: figure *j*— $1$  by  $1\frac{7}{16}$  inches; figure *i*— $1\frac{1}{8}$  by  $1\frac{1}{4}$  inches.

In figure *a*, plate xi., is shown a roughly made pendant consisting of a narrow strip of conch shell, with a hole through one end. The other end has been left in the rough state. This specimen is  $2\frac{3}{8}$  inches long,  $\frac{9}{16}$  wide, and  $\frac{1}{4}$  thick. It comes from Beverly township.

We have another crude pendant made of a rough, angular fragment of a massive species of *Unio* (perhaps *U. plicatus*) represented in figure *b*, plate xi. The whole specimen has not been smoothed and polished in any way. The hole is a little larger than  $\frac{1}{8}$  of an inch and was drilled straight through, and not from both sides as is so usually done. The natural nacreous surface of the original shell still remains. It is  $2\frac{1}{4}$  inches long,  $1\frac{3}{16}$  wide and  $\frac{5}{16}$  thick. This object was found on lot 19, concession 3, London township.

In figure *c*, plate xi., we have what is, in all probability, one of the most unique forms of pendants yet discovered; at least we have never seen anything similar illustrated. It was made of a small tropical shell, probably a *Strombus*, the apex of which was ground flat, and the solid columella reduced to the upright cylindrical projection seen in the figure. The marks



of the whorls are still to be seen on the lower surface. The flanged portion, or base, is  $\frac{7}{8}$  of an inch wide and is less than  $\frac{1}{16}$  of an inch thick at the edge; the entire height is  $\frac{1}{16}$  of an inch. An oblong lateral hole has been made through the side to meet the vertical one which is about  $\frac{3}{8}$  of an inch in diameter. This very interesting specimen comes from Beverly township.

The ornament shown in figure *d*, plate xi., seems to be a fragment of one of the sandal-shaped gorgets, but it may also have been given its present form originally. Its length is 2 inches, and its width  $1\frac{7}{8}$ . It was found near London, Ont.

Figure *f*, plate xi., represents a large pendant made of a piece of tropical shell. It seems to have been much longer. The fractured edge has been smoothed a little. There are three incised lines across each corner. The proportions of this ornament are: Length,  $2\frac{3}{8}$  inches; width,  $2\frac{5}{8}$  inches. It comes from Brantford township, Brant county.

The pendant of tropical shell shown in figure *e*, plate xi., has an eye drilled through a raised projection. The other "side is perfectly smooth but for a few slight, half aimless looking scratches that were meant for a design."<sup>1</sup> The ends are polished but the condition of the edge at the sides show that portions had been broken off each side. Both of these edges are not polished or even smoothed.

Entire shells of small oceanic species were also used as pendants. Figure *d*, plate xii., shows a small *Strombus*, of what species it would be difficult to say with accuracy. Part of the rostrum or beak has been broken off. A hole  $\frac{3}{16}$  of an inch in diameter has been pierced through the lip. The length of this shell is 2 inches. It was found in Nottawasaga township, Simcoe county.

Figure *b*, plate xii., represents a small specimen of *Fulgur* or *Busycon perversum* from the Atlantic, which has been worn as a pendant. It has a perforation through the lip, and shallow grooves have been cut on each side of the rostrum, from which end it was, no doubt, suspended; the hole in the lip perhaps serving for the attachment of other ornaments, such as strings of beads, etc. Through long burial it is now quite chalky in appearance. Its length is  $2\frac{1}{4}$  inches. It comes from Tiny township (lot 11, concession 10), Simcoe county.

In figure *a*, on the same plate, we have a shell of the same species. In this specimen the suspension was effected by a small hole through the rostrum. Another hole was drilled through the upper part of the lip. This shell still retains some of the natural coloring on the surface, the radiating bars of reddish brown being particularly fresh. The length of this specimen is  $1\frac{7}{8}$  inches. It was found in Nottawasaga township, Simcoe county.

Another almost entire shell, perforated for suspension, is shown in figure *c*, plate xii. This is made of another species of shell, *Fulgur pyrum* (?), and differs from figures *a* and *b*, in being dextral whorled. As may be seen from the illustration it is not so perfect as the other examples, portions of the spire having been broken in, exposing the columella. Its length is  $1\frac{7}{8}$  inches. It was found in Onondaga township, Brant county.

Dr. Wilson describes a shell pendant from Nottawasaga which, he says, "has the upper whorls removed, so as to expose the internal canal. Five lines, or notches, are cut on the inner face of the canal, and it is perforated on the opposite edge, showing in all probability where the wampum,

<sup>1</sup> *Archæological Report*, 1904, p. 45.

scalp-lock, or other special decoration of its owner was attached. It also exhibits abundant traces of its long and frequent use . . . and all the natural prominences are worn nearly flat by frequent attrition.”<sup>1</sup>

### *Gorgetts.*

These are thin, mostly nearly circular, concavo-convex plates derived from the most dilated portion of large tropical shells. (See figure *g*, plate XIII., copied from Holmes' plate.)

We find that the early explorers of the Atlantic Coast make frequent mention of gorgets and other ornaments; and as these allusions are always interesting, we will quote a few of them here. Perhaps one of the earliest we have is that of Beverly, who was an accurate observer of the habits and customs of the Indians he encountered. He gives a picture of a Virginia Indian in summer dress, of whom he says: “At his Ear is hung a fine Shell with Pearl Drops. At his Breast is a Tablet or fine Shell, smooth as polish'd Marble, which sometimes also has etched on it a Star, Half Moon, or other Figure, according to the maker's fancy.”<sup>2</sup> On another page he writes, “Of this Shell they also make round Tablets of about four inches diameter. . . . These they wear instead of Medals before or Behind their Neck.”<sup>3</sup> Brickell<sup>4</sup> says of the Indians of North Carolina: “They frequently make of these *Shells*, several sorts of *Figures*, in imitation of *Gorges*, *Crosses*, *Stars*, or any other odd kind of *Figure* that their imagination suggests, these they wear about their Necks and Arms tied with a String; there are some of these *Gorges*, that will sell for three or four *Buck Skins* ready drest, whilst others are only valued and sold for one *Doe Skin*.”<sup>5</sup> Adair gives the following account: “The American *Archi-magus*, wears a breast-plate, made of a white conch-shell, with two holes bored in the middle of it, through which he puts the ends of an otter-skin strap, and fastens a buck-horn white button to the outside of each.”<sup>6</sup> “The northern savages,” says Lafitau, “wear on the breast a plate of hollow shell, as long as the hand, which has the same effect as that which was called *Bulla* among the Romans.”<sup>7</sup> And Kalm, describing the ornaments of some Indians he saw at Lorette, in Quebec, writes: “Round their neck, they have a string of violet wampums, with little white wampums between them. These wampums are small, of the figure of oblong pearls, and made of the shells which the *English* call clams. . . . At the end of the wampum strings many of the *Indians* wear a large French silver coin, with the King's effigy, on their breasts. Others have a large shell on the breast, of a fine white colour, which they value very high and is very dear.”<sup>8</sup>

Judging from the large numbers of these found almost over the entire eastern seaboard of North America, from Florida to our own Province, gorgets were a very popular kind of ornament. The stone graves and caves of Tennessee have produced most of these objects, many of them

<sup>1</sup> *Canadian Journal*, (1854-55), Vol. III., p. 158.

<sup>2</sup> *History and Present State of Virginia*, Book III., p. 4. (See figure *d*, plate XIII.)

<sup>3</sup> *Ibid.*, p. 59.

<sup>4</sup> *Natural History of North Carolina*, p. 337.

<sup>5</sup> Lawson, whose account is substantially the same as Brickell's, says; “There be others, that eight of them go readily for a doe skin.”—*History of Carolina*, etc., (Raleigh reprint, 1860), p. 315; *apud* Jones.

<sup>6</sup> *History of the American Indians*, p. 84.

<sup>7</sup> *Mœurs des Sauvages Américains*, Vol. 2, p. 61; *apud* Holmes. (See figures *a* and *b*, plate XVIII.)

<sup>8</sup> *Travels into North America*, Vol. III., p. 180.

being engraved with symbolic devices. They are common here in Ontario, but are invariably found associated with articles of European origin, thus showing that their manufacture, or, what is more likely perhaps, their introduction from the south, was comparatively recent. A few, however, may perhaps be prehistoric.

Having lost every vestige of their natural color, these objects are now far from being "things of beauty;" in fact, to see them in their present condition, and not knowing of what material they were made, some would be inclined to ask "What beauty did the Indian see in these things?" However, one need only look at a Giant Conch or *Busycon*, from which most of these ornaments are derived, to see how beautiful they really were. Mr. Boyle thinks that the beauty of these objects was, perhaps, further enhanced by the application of various colors. A bone bead in the Museum (described in the *Annual Report* for 1900) was decorated in this way, and he argues from this that this species of decoration might have been used on other ornaments as well; especially those that lacked colors of any kind. This sounds reasonable enough, although there is no proof that this was so; the specimens themselves offer no evidence of such treatment.

We have mentioned that in Tennessee more shell ornaments have been found than anywhere else; in fact, Mr. Holmes calls it, a "great storehouse" of shell relics. Here have been discovered shell breast-plates on which are engraved highly conventionalized representations of the rattlesnake—a species of snake both feared and venerated by many tribes of the American Indians. We present an illustration of one of these gorgets in figure *e*, plate XII. The reader will not fail to see the close resemblance it bears to figure *f*, on the same plate, representing a gorget found in a large bed of ashes, fully two feet below the surface, in Brantford township, Brant county. Mr. Boyle gives a very good description of this gorget in the *Archæological Report* for 1899, which is as follows: "The straight edge . . . still shows marks of the sawing that was required to separate this from the other portion, but it is, of course, impossible to say whether the cutting was performed after an accidental break had spoiled the whole gorget, or whether an entire object had been cut in two for any reason. In addition to the original suspension holes, other two have been bored near the straight edge, no doubt that the gorget might hang more evenly, in keeping with its change of shape, yet without any regard to the position of the figure which would now be upside down. It is observable too, that the more recently formed holes bear even deeper signs of wear than the original ones do. Still further comparing this specimen with perfect gorgets, it will be seen that only the tail and the adjoining section remain while most of two other sections on a convex part of the shell are nearly worn out by contact with the human body—presumably. Of the second section from the tail, a little cross-hatching remains, and to the right are the three dots in line belonging to a bar that has disappeared; while further on still, is a single dot which was, no doubt, within two circular lines like those that remain, and near the dot are portions of the parallel lines separating the design from the border. The chevron, or diagonally opposed lines to indicate the tail are not so well made as those on most of the specimens figured in archæological books, but they show clearly enough the intention of the design.

"The fact that, so far as known, this is the only specimen of its kind found in Ontario is of itself almost sufficient to warrant the belief that it



is accidental, intrusive, imported ; and we may go so far as to say that the secondary wearing of the gorget upside down would tend to show that the owner of this portion either did not know, or did not care how it was suspended, in which case it is plain that the symbolic nature of the work possessed no interest for him, and that he wore the gorget simply as a gawgaw, or because the lines may have suggested some 'big medicine' on account of their being quite unlike anything he had ever seen before." (p. 25).

The proportions of this very interesting specimen are : length,  $4\frac{3}{4}$  inches ; width,  $2\frac{1}{4}$  inches.

Besides this we have only one other engraved shell gorget in the Museum, and this comes from a mound in Otonabee township, Peterboro' County. It is shown in figure *a*, plate xiv. We shall also quote Mr. Boyle's description of this specimen. He says "It is a part of a *busycon* or some other large shell, and measures nearly eight inches in length by four in breadth. In a rough way it seems to represent a turtle, the hinder portion of which is broken off. The incised lines are sharply cut, but the execution is so rough as to show us that no drawing had been made to guide the hand or the graver. Perhaps the most instructive lesson deducible from this specimen is to be found in the central part of the design, where we find that the workman has *not* employed any kind of dividers to mark what he intended to be circles. The work has been hurriedly performed—perhaps on purpose to place as an offering with the body buried in this mound, for not only are the lines unsymmetrical in their arrangement, but on the right side it will be noticed that one of the rows of shallow holes has been left incomplete. Several tons of earth were carefully sifted in vain, to find what appeared to be the missing hinder part of the specimen. The conclusion, however, was at last reached that the portion figured was all that had been buried ; probably all that ever had been made ; that it had been made simply to deposit in the mound, and this supposition receives support from the fact that the suspension holes on the right-hand edge of the body show no signs of the slightest wear." <sup>1</sup>

The long sandal-shaped gorget represented in figure *d*, plate xiv., comes from near London, in Middlesex county. It is 8 inches long and 3 wide. This is the only one of the kind in the Museum. A similar specimen from Ohio, in the U. S. National Museum, is nearly nine inches long. A Mr. Whitney, who discovered one of these objects, in his letter transmitting it to the National Museum, says that "about ten pairs of the shell sandals of different sizes, and made to fit the right and left feet" <sup>2</sup> were found. While the outline of these gorgets approximates that of the sole of the foot, there is nothing in their appearance otherwise which would indicate such a use ; and, besides, they would be almost too fragile for this purpose anyway. Some fifteen or twenty gorgets of a similar shape were once taken from a grave in Indiana.<sup>3</sup> A comparison with Holmes' figure<sup>4</sup> and the one in Moorehead's *Prehistoric Implements*, will show how remarkably similar these specimens are in every way. In each example there are three holes and all placed in nearly the same position. Our specimen is concavo-convex.

<sup>1</sup> *Archæological Report* for 1896-97, p. 56.

<sup>2</sup> "Art in Shell," p. 265.

<sup>3</sup> *Prehistoric Implements*, p. 344, figure 503.

<sup>4</sup> Plate L, figure 5.

Figure *b*, plate xv., represents a large gorget derived from the dilated parietal portion of a *Busycon* or *Strombus*. It is in very good condition; though, like all the rest of these shell objects, has been reduced to a substance like chalk. This specimen is nearly 5 inches long, and a little over  $3\frac{3}{4}$  inches wide. It was found in North Cayuga township, Haldimand county.

There are several other specimens resembling this one in the Provincial collection. One of them, from near London, is  $5\frac{1}{2}$  inches long and 4 inches wide. It has three perforations in a row, one of them being a little further away from the others which are close together. This and the outer one of the two show signs of wear from the suspension cord. The middle hole is not worn at all, and it evidently was made by mistake, the wearer afterwards discovering that the ornament would not hang straight. It is derived from the lip of a *Busycon* and is much weathered.

The largest shell gorget we have also is made from the lip of a *Busycon*. It is 7 inches long and 5 wide, and comes from the Teeple farm, Beverly township.

In figure *a*, plate xv., is represented the concave side of a gorget pierced with three holes. It was found in a grave in Onondaga township, Brant county. The edges are very much corroded. Its proportions are: length,  $4\frac{1}{8}$  inches; width  $3\frac{3}{8}$  inches.

The specimen shown in figure *g*, plate xi., comes from lot 10, concession 3, Onondaga township, Brant county, and is the smallest shell gorget in the Museum. It is  $1\frac{7}{8}$  inches wide.

A gorget from Norfolk county is shown in figure *b*, plate xiv. The markings on the surface are the natural lines of growth, the object being derived from the lip of a *Busycon*. It is  $3\frac{1}{4}$  inches in diameter.

These two-holed gorgets may have been strung in the manner shown in figure *d*, plate xviii., which we copy from one of Beverly's engravings.

In figure *c*, plate xiv., is represented a gorget with three holes, the one in the centre being much larger than the two others. This one is nearly four inches in diameter. It comes from Norfolk county. We have six specimens of this type, of which two are fragmentary. One of them is tinged a beautiful pale green color, possibly from contact with copper. It was found near London, and is  $3\frac{1}{2}$  inches in diameter. Another one is only  $2\frac{3}{8}$  inches wide. A large portion of it is missing. Similar specimens have been found in Ohio.

Figure *b*, plate xvi., represents the hollow side of a large oval gorget, apparently made from the body-whorl of the *Busycon*. It comes from the Sealey farm in Brant county. Almost the whole of the surface of the convex side is coated with what looks like iron rust. The diameters of this specimen are  $5\frac{1}{8}$  and  $5\frac{3}{8}$  inches. It is pierced with five holes.

In figure *a*, on the same plate, we have another shell gorget from the same place. It has eight holes through the middle portion, and there are also two holes on the margin. This specimen is  $3\frac{7}{8}$  inches long.

Figure *a*, plate xvii., represents the concave side of a large gorget from an Indian mound near Port Colborne. It has seven perforations, the two larger being no doubt intended for the suspending cord. The deeply shaded portions show where the gorget came into contact with iron, two articles made of this metal, (a knife and pair of scissors) having been found in the same mound. It measures  $4\frac{3}{8}$  inches across its longer diameter.

These specimens with supernumerary holes may have been worn in the manner shown by figures *a* and *b*, plate xviii. (which Mr. Holmes copies

from Laftau), the extra holes serving for the attachment of auxiliary ornaments, such as pendants, beads, etc.

Professor Holmes figures and describes a gorget with four holes, which comes from Beverly township. The holes are arranged in the form of a rectangle. The gorget itself is described by Mr. Holmes as "key-stone" shaped. (See figure 1 on Holmes' plate L., "Art in Shell").

### *Pins.*

This is a class of objects frequently found in the mounds and stone-graves of the middle and south-eastern United States. Professor Holmes says of them: "The exact uses to which these pins were applied by the mound-building tribes are unknown; various uses have been suggested by archæologists. The favorite idea seems to be that they were hair-pins, used by the savages to dress and ornament the hair. It would seem that many of them are too clumsy for such use, although when new they must have been very pretty objects . . . . Similar objects of bone or ivory, often tastefully carved, are used by the natives of Alaska for scratching the head, although it seems improbable that this should have been their most important function."

\* \* \* \* \*

"It is possible that they may have served some purpose in the arts or games of the ancient peoples; yet when we come to consider the very great importance given to ornaments by all barbarians, we return naturally to the view that they were probably designed for personal decoration."<sup>1</sup>

There are several forms, some being headless, while others have large, globular heads, and others, again, have broad, flattened heads. Figure *g*, plate XII., shows one of the latter type, from Nottawasaga township, Simcoe county. This is the only example in the Provincial Museum. It is  $3\frac{3}{4}$  inches long and the head measures  $\frac{3}{4}$  by  $1\frac{1}{2}$  inches. The shaft is perforated near one end. Our engraving, unfortunately, does not bring out the beautiful marbling of the foliation. The head or flanged portion of this specimen appears to be derived from the peripheral ridge of the shell, the long shaft being cut from the body below or the shoulder above. Professor Wyman described and figured a somewhat similar specimen (except that his was shorter and much thicker in the shaft), from a burial mound at Black Hammock, Florida, in the *American Naturalist*.<sup>2</sup> He says that it was "cut from that portion of a *Pyrula*, namely, the suture, where one whorl joins the preceding." As it is perforated near the point he regards it as a pendant ornament. It is altogether likely that our specimen was also a pendant. General Thurston, in his *Antiquities of Tennessee*,<sup>3</sup> illustrates a shell object resembling ours, except that it is not perforated. He calls it a "brackett," and says it "was ingeniously carved from the heavy point and the perpendicular column" of the shell. "The ingenuity of the mechanic, and the taste that suggested this useful little object," he says, "seem to indicate a somewhat advanced condition of society." It would seem from this that Mr. Thurston believes his specimen to have had a useful rather than an ornamental function. But, while the precise use of these objects is open to conjecture, we may safely assume that they were intended for personal ornaments.

<sup>1</sup> "Art in Shell," p. 217.

<sup>2</sup> Vol. 2, 1869, p. 455. Plate X.

<sup>3</sup> Cincinnati, 1890, p. 315, fig. 223.



*Other Ornaments.*

In figure *b*, plate xix., we have a very interesting specimen, the general outline of which approximates that of a fish, the mouth even being indicated. The tail portion is lacking. It is made of *Unio* shell of which the pearly nacre still remains. In its present condition it is difficult to determine what species of *Unio* furnished the material for this unique ornament. One of the spots for the attachment of the adductor muscles remains, as well as the pallial line. It is pierced with five holes, one of which serves to indicate the eye of the fish, and the others were no doubt intended for suspension and the attachment of subsidiary ornaments. A portion of the convex surface is considerably polished, showing that the ornament was worn with the hollow side outward. Its proportions are:—length,  $2\frac{3}{8}$ ; width,  $1\frac{1}{8}$  inches. It comes from Beverly township, Wentworth county.

Figure *c*, plate xix., shows a decorticated valve of *Unio ventricosus* from a prehistoric village site in Wilmot township, Waterloo county. It was pierced with three holes.

A peculiar ornament, also made of *Unio* shell, is shown in figure *d*, plate xix. Its contour suggests no particular resemblance to any animal form. The notches may have served for the attachment of the suspension cord. A portion of the smaller end is broken off. Its proportions are:—length,  $1\frac{5}{16}$  inches; width,  $\frac{1}{16}$  of an inch. It was found on the Sealey Farm, Brantford township.

We are tempted to regard the specimen shown in figure *g*, plate xix., as a sort of lizard effigy. The lateral projections plainly represent limbs, and the head and tail are also quite evident. It is made of conch shell, is highly polished, and resembles ivory. Its length is  $2\frac{5}{16}$  inches, and it is  $\frac{5}{8}$  of an inch wide. It comes from Beverly township.

The paddle-shaped specimen represented in figure *j*, plate xix., at present forms part of a string of shell and European glass beads which were found near Lambton Mills, York county. It may have been used for fastening strings of wampum to the clothing by passing it through a hole in the garment, just in the same way as the guard of a watch chain is passed through the button-hole. On one side there are several transverse markings. It is made of conch shell and is  $1\frac{1}{4}$  inches long.

Figure *h*, plate xix., shows an unfinished specimen. It is  $1\frac{9}{16}$  inches long and  $\frac{9}{16}$  wide.

Another shell ornament is shown in figure *a*, on plate xix. It is nearly 1 inch long,  $\frac{5}{16}$  wide, and a little more than  $\frac{1}{16}$  thick. On one side there is an incised longitudinal line with four short lines crossing it at right angles.

In figure *c*, plate xix., is shown a fragment of conch shell on which is incised a fairly-well executed human face. The lines descending from the mouth may indicate tattoo marks, or perhaps a beard—thus to typify a European. It is 1 inch long, and was found in Brant county.

In the specimen represented in figure *f*, plate xix., we have an example showing the native appreciation of the beautiful iridescent nacre of shells. This specimen, the Hon. F. R. Latchford, K.C., says, “is a disc formed by breaking a large *Unio* shell (right valve) away from a centre formed by the posterior adductor muscle impression or attachment. The nacreous plates are so highly iridescent that the possessor of this ornament must have attracted great attention. The species from which the disc was cut is conjectural. The test is fresh and shows the greenish

tint common to *Unio ventricosus* or *U. subovatus*. It might also be made from *U. ligamentinus*, which is common in the Thames drainage." It is  $1\frac{1}{8}$  inches in diameter and comes from Delaware township, Middlesex county.

There is in the Museum another disc from Eagle Place near Brantford. Mr. Latchford thinks it is derived from a sea-shell. The disc is almost perfectly circular, a little over 1 inch in diameter, and nearly  $\frac{1}{4}$  inch thick. The nacreous portion is iridescent and almost like some species of *Halotis* or Abalone shell.

Figure *i*, plate XIX., may perhaps be a portion of a gorget. It is made of conch shell. At the upper right-hand corner there is a rectangular raised portion, which appears to have been produced artificially. The incised markings may have had some special significance to the maker. This fragment measures  $1\frac{3}{4}$  by 2 inches and is  $\frac{1}{4}$  of an inch thick. It comes from near Brantford, in Brant county.

From the use of shells as ornaments to that of their use as currency is but a step.

#### IV. WAMPUM.

It consisted of small cylindrical (see figure *n*, plate ix.) and also disc-shaped beads made from different kinds of shells.

Several early writers describe the method of manufacturing. "The process of manufacturing it," says Burnaby, "is very simple. It is first clipped to a proper size, which is that of a small oblong parallel piped, then drilled, and afterward ground to a round smooth surface, and polished."<sup>1</sup> Brickell says: "This Shell they grind smaller than the small End of a *Tobacco Pipe*, or a large *Wheat Straw*, four or five of them are about an inch in length, and every one drilled through, polished and made as smooth as Glass, yet they are as strong as *Beads*."<sup>2</sup> And on the following page he states that "They grind these Shells upon Stones and other things, 'till they make them current." We learn from Van Der Donck that "They strike off the thin parts of these shells and preserve the pillars or standards, which they grind smooth and even and reduce the same according to their thickness, and drill a hole through every piece, and string the same on strings, and afterwards sell their strings of wampum in that manner."<sup>3</sup>

The great labor in preparing it, however, was the boring; which, according to one writer, was effected with a sharp flint.<sup>4</sup> Roger Williams says that the New England Indians "Before ever they had Awle blades from Europe they made shift to bore this their shell money with stones."<sup>5</sup> Brickell asserts that "The Drilling is the most difficult to the *Europeans*, which the *Indians* do with a Nail stuck in a Cane or Reed, but whether they have any method in softening these Shells is uncertain. They rowl it continually on their Thighs with their right Hand, and hold the bit of Shell with their left; thus by degrees they drill a hole through it, which is a

<sup>1</sup>*Travels Through the Middle Settlements in North America, in the years 1759 and 1760*, etc., by Rev. Andrew Burnaby. (Third edition, London, 1798), p. 80.

<sup>2</sup>*The Natural History of North Carolina*, p. 338.

<sup>3</sup>*Ibid.*, p. 239.

<sup>4</sup>"New Netherlands," *Collections New York Historical Society*, Vol. I. (2nd series), p. 206.

<sup>5</sup>Brownell: *The Indian Races of North and South America* (Hartford, Connecticut, 1861), p. 39.

<sup>6</sup>"A Key into the Language of America, or an Help to the Language of the Natives in that part of America called New England." London, 1643. Reprinted as Vol. I. of the *Collections of the Rhode Island Historical Society* (Providence, 1827), p. 129.

tedious Work, but especially in making their *Ronoak*, four of which will scarce make one length of *Wampum*.<sup>1</sup> On a previous page the same writer observes that the conch shells are very "hard and difficult to be cut, yet some *European Smiths* have tried to drill these *Shells*, thinking to get an advantage by them, but it proved so hard and tedious in the working, that nothing could be gained thereby, that they have intirely laid it aside for the *Indians* to manage, who never value their Time, so that they can make them according to their Fancy."<sup>2</sup> The Southern Indians, according to Jones,<sup>3</sup> pierced shell beads with heated copper drills. Schumacher states that the Santa Barbara Indians perforate shells with a flint drill.<sup>4</sup>

We have in the Museum an unfinished piece of wampum which is shown in figure *o*, plate ix. The edges have been rubbed but not enough so to make the bead perfectly round. The hole also has been only partly bored.

One of the principal shells used in the manufacture of wampum was the conch. The large *Busycon* was likewise used to a considerable extent. Wood says the Narraganset Indians formed their wampum "Out of the inmost wreaths of Periwinkle-shells." Williams states that they made the white sort "Of the stem or stocke of the Periwinkle, which they call, Meteaûhock, when all the shell is broken off." The blue sort was "made of the shell of a fish, which some English call Hens, Poquaûhock."<sup>5</sup> "Wampagne," says Mr. Gookin, another early writer, "is made artificially of a part of the wilk's shell."<sup>6</sup> Beverly writes that the Virginia Indians, besides their wampum made of conch shells, "They have also another sort which is as current among them, but of far less value; and this is made of Cockel-shell, broke into small bits with rough edges, drill'd through in the same manner as Beads, and this they call *Roenoake*, and use it as the *Peak*."<sup>7</sup> Cartier says the Hochelagans had a species of wampum known as *Esurguy*, which Sir J. W. Dawson thinks may have been "made of the shells of some of our species of *Melania* or *Paludina*, just as the Indians on the coast used for beads and ornaments the shells of *Purpura lapillus* and of *Dentalium*, etc."<sup>8</sup> Lewis H. Morgan says that "the primitive wampum of the Iroquois consisted of strings of a small fresh-water spiral shell called in the Seneca dialect *Ote ko-a*, the name of which has been bestowed on the modern wampum."<sup>9</sup> According to Dawson "The New England Indians used the hard shells of the 'Quahog' (*Venus mercenaria*), the purple spot at the posterior end of the shell forming the more precious blue wampum. The more northern coast tribes sometimes used the shells of the great clam (*Macra solidissima*). The inland nations purchased wampum from those of the coast, and, like the Coast Indians, they used small shells perforated with holes. The wampum of the Iroquois,

<sup>1</sup>P. 339.

<sup>2</sup>*Ibid.*, p. 338.

<sup>3</sup>*Antiquities of the Southern Indians*, etc., by C. C. Jones, Jr. (New York, 1873), p. 230.

<sup>4</sup>Hayden Survey, *Bulletin* 3, 1877, p. 43.

<sup>5</sup>*New England's Prospect*, p. 69.

<sup>6</sup>*Key*, p. 128. Mr. Trumbull (in the *Publications of the Naragansett Club*, Vol. I. (Providence, R. I., 1866), "says that the Poquaûhock was the *Venus mercenaria*, the round clam or quahaug: the Meteaûhock was probably the *Purpura carica* and *P. canaliculata*, which have retained the name of 'periwinkle' on the coast of New England." (Burrows edition *Jesuit Relations*, Vol. 3, p. 312; note).

<sup>7</sup>*History of Plymouth*, p. 70; *apud* Jones' *History of the Ojibway Indians*.

<sup>8</sup>*History and Present State of Virginia*, Book III., p. 59.

<sup>9</sup>*Fossil Men*, p. 32; footnote.

<sup>10</sup>*Fifth Annual Report on the New York State Cabinet of Natural History*, p. 73; *apud* Holmes.



and also the Hochelagans, was made of freshwater univalves, probably the *Melania*. They also ground into perforated discs for beads the pearly shells of freshwater Unios."<sup>1</sup>

"The utilization of shells for money," says Holmes "would naturally originate from the trade arising from their use as utensils and ornaments in districts remote from the source of supply. Yielding in the worked state a limited supply, and at the same time filling a constant demand, they formed a natural currency, their universal employment for purposes of ornament giving them a fixed and uniform value. They have undoubtedly been greatly prized by the ancient peoples, but on the part of the open-handed savage they were probably valued more as personal ornaments than as a means of gratifying avaricious propensities."<sup>2</sup>

But it is when we come to consider the amount of labor and time which was involved in the shaping and perforating of these beads that we can understand why they were regarded as the most precious possessions of the Indians. The time required to manufacture beads out of this intractable material was no doubt the chief consideration in determining their value. Among the Passamaquoddy, for instance, "a single bead required a full day's work to make and finish it,"<sup>3</sup> and Lindström, writing of the Indians of New Sweden, says that one person "cannot make more in a day than the value of six or eight stivers."<sup>4</sup>

Wampum has been valued as follows: In North Carolina, according to Brickell, "Four Cubits of this purchase a dressed *Doe Skin*, and six or seven are the purchase of a dressed *Buck Skin*." A little further on the same author says, "A *Cubit* of the *Indian* measure contains as much in length as will reach from the Elbow to the end of the little Finger. They never regard or stand to question whether he is a tall or short Man that measures it; but if this *Wampum* or *Peak* be of a black or purple Colour, as some part of the Shell, then it is twice the Value."<sup>5</sup> Beverly says of the wampum of the Virginia Indians: "The *Indians* had nothing which they reckoned Riches before the *English* went among them, except *Peak*, *Roenoke*, and such like trifles made out of the *Cunk* shell. These past with them instead of Gold and Silver, and serv'd them both for Money and Ornament. It was the *English* alone that taught them first to put a value on their Skins and Furs, and to make a Trade of them. *Peak* is of two sorts, or rather of two colours, for both are made of one Shell, tho of different parts; one is a dark Purple Cylinder, and the other a white; they are both made in size and figure alike, and commonly much resembling the *English Buglas* but not so transparent nor so brittle. They are wrought as smooth as Glass, being one-third of an inch long, and about a quarter diameter, strung by a hole drill'd thro the Center. The dark colour is the dearest, and distinguish'd by the name of *Wampom Peak*. The *English* men that are call'd *Indian* Traders, value the *Wampom Peak*, at eighteen pence *per* Yard, and the White *Peak* at nine pence. The *Indians* also make Pipes of this, two or three inches long, and thicker than ordinary, which are much more valuable."<sup>6</sup> We learn from Williams that of the white sort six were "currant with the English for a Penny," and of the black or purple kind "three make an English penny."<sup>7</sup> On page 129 he says,

<sup>1</sup> *Fossil Men*, p. 140.

<sup>2</sup> "Art in Shell," p. 235.

<sup>3</sup> Leland's *Algonquin Legends of New England*, p. 305; footnote.

<sup>4</sup> Pennsylvania Historical Society, Vol. III., p. 131.

<sup>5</sup> Pp. 338-339.

<sup>6</sup> History of Virginia, Book III, pp. 58-59.

<sup>7</sup> *Key*, etc., p. 128.

"This one fathom of this their stringed money, now worth of the English but five shillings (sometimes more) some few yeeres since was worth nine and sometimes ten shillings per Fathome. . . . Their white they call *Wompam* (which signifies white) : their black Suckaubuck (Sácki signifying blacke)." Schoolcraft tells us that "A single string of wampum of one fathom, rated at five shillings in New England, and is known, in New Netherlands, to have reached as high as four guilders, or one dollar and sixty-six cents."<sup>1</sup>

Wampum was readily adopted as a medium of exchange by the early white traders, not only in their transactions with the native Indians but also among themselves. "In Massachusetts 'wampampeag' was legal tender (Act of 1648) for all debts less than forty shillings, 'except county rates to the treasurer,'—the white, at eight for a penny, and the black at four for a penny."<sup>2</sup> Even in Canada, as late as the year 1792, "An Act to permit the importation of wampum from the neighboring States by the inland communication of Lake Champlain, and the River Richelieu or Sorel," was made legal at the First Session of the first Provincial Parliament of Lower Canada.<sup>3</sup> The Rev. Peter Jones, in his *History of the Ojibway Indians*, but who does not give his authority for the statement, says that "Wampum was first introduced at Plymouth, New England, as an article of commerce, by Isaac De Razier, a Dutch merchant, in the year 1627." The Dutch with their usual enterprise also introduced the lathe in manufacturing this currency, thus polishing and perforating it with exactness ; and, as Schoolcraft says, "soon had the monopoly of the supply of this article for the whole Indian trade."<sup>4</sup> In Schoolcraft's time it was still manufactured at Hackensack, in New Jersey, and in several towns in New York ; there being even yet a demand for it by the Western fur traders. The factories in Jersey City employed German workmen to fabricate the wampum.

This shell money seems to have had a fixed value among the different tribes. Beverly, for instance, states that "These sorts of Money have their rates set upon them as unalterable, and current as the values of our Money are."<sup>5</sup> And Adair furnishes confirmatory testimony as to the truth of this statement. He says, "With these they bought and sold at a stated current rate, without the least variation for circumstances either of time or place ; and now they will hear nothing patiently of loss or gain, or allow us to heighten the price of our goods, be our reasons ever so strong, or though the exigencies and changes of time may require it."<sup>6</sup>

The uses of wampum may be briefly summarized as follows : It was not only used as currency and ornaments, but was used for presents, or gifts ; it was often paid as a ransom for a prisoner ;<sup>7</sup> with it the Indians made atonement for crimes.<sup>8</sup> It was sent with messengers as their credentials, and represented the chief's authority. It has been used even among the Indians of the Six Nations Reserve, in recent years, as an important part of the "invitation stick." Among the Hurons, according to Le

<sup>1</sup> *Notes on the Iroquois*, etc. (Albany, N.Y., 1847), p. 357.

<sup>2</sup> Burrows' Edition *Jesuit Relations*, Vol. 3, p. 313. (See Ingersoll's "Wampum and its History," in *American Naturalist*, Vol. XVII. (1883), pp. 467-479.

<sup>3</sup> Quoted by Mr. Boyle in the *Fourth Annual Archaeological Report* (1890-91), p. 52 ; footnote.

<sup>4</sup> *Notes on the Iroquois*, p. 357.

<sup>5</sup> Book III., p. 59.

<sup>6</sup> *History of the American Indians*, p. 170.

<sup>7</sup> Bressani's *Relation*, 1653, Vol. 39, p. 77.

<sup>8</sup> See Brickell's *Natural History of Carolina*, p. 339.

Jeune's *Relation* (p. 209, Vol. 17), wampum was used as a thank offering to their *Asciwandic*, or familiar demon; and in the *Relation* of 1672-73 (Vol. 57, p. 277), we read of an Indian adorning a stone idol with wampum beads. The Jesuit *Relations* contain numerous references to the use of "porcelain" (which was the name given to wampum by the early French missionaries and explorers), not only among the Indians, but by the French themselves, in their dealings with the Indians. It was used as church offerings, and to obtain prayers for the repose of the soul, etc.<sup>1</sup>

Another use of wampum may be mentioned. Cadwallader Colden, in speaking of the Mohawk Indians, says: "All the Nations round them have for many Years, intirely submitted to them, and pay a yearly Tribute to them in Wampum."<sup>2</sup> And we learn also from Druillettes' *New England Tour* (1650-51) that the Iroquois exacted annual tribute in the shape of "porcelain" from the Sokouchiois, a tribe closely allied to the Algonquins.<sup>3</sup>

In the early days coin was scarce and paper money unknown, so that church offerings were often made with *seawan* by the Dutch settlers. Indeed, we have a parallel to the story of a gentleman in India paying for the building of a beautiful bungalow entirely with cowries (it required 16,000,000), the shell money of the Orient. Schoolcraft tells of a church on the Jersey shore, opposite New York, which was "constructed out of funds contributed, from sabbath to sabbath, in grains of *seawan*, by the Dutch people."<sup>4</sup>

"The name *Wampum*," says Holmes, "is often applied to shell beads indiscriminately, but frequently has a more restricted significance, referring to small cylindrical varieties used in strings and belts. It was known first in New England as *wampumpeag*, *wampompeage*, *peag*, *wompam* and *wampum*; the Dutch of New Sweden knew it as *seawan*, *sewant*, and *seawant*, while on the Virginia coast, it was called *peak*, a roughly made variety being known as *ronoak* or *roenoke*, a heavy, flattish beads pierced edgeways were called *runtees*. It is probable that all these names are American in origin, although there is some difference of opinion as to their derivation. Loskiel says that wampum is an Iroquois word meaning muscle, but according to Morgan, who is probably the best modern authority on the subject, the word *wampum* is not Iroquois in origin but Algonquin, as it was first known in New England as *wampumpeage*."<sup>5</sup>

Unless some of the perforated spiral shells and the disc-shaped specimens, described in a previous section, were regarded as such, no wampum of any kind so far as we know, has been found on a prehistoric village site in Ontario. The discoidal beads from the Rice Lake mounds, however, are undoubtedly prehistoric, as nothing at all suggestive of European contact was found in these mounds. Beauchamp says, "I have mentioned the lack of wampum among the early New York Iroquois, as a proof that they had not reached the sea; but it was not abundant even on the coast in prehistoric times. On early Iroquois sites it is not found, nor anything resembling it . . . . A few stray, prehistoric, small wampum beads might be expected low down in the Mohawk valley, but I know

<sup>1</sup> The reader who wishes to pursue the inquiry any further must be referred to the excellent edition of these *Relations* issued by the Burrows Co., of Cleveland; *sub voce* "Porcelain" in the Index Volumes.

<sup>2</sup> *The History of the Five Indian Nations of Canada*, etc. (Reprint, Toronto, 1902), Vol. II., p. xviii.; *Intro*.

<sup>3</sup> Burrows Ed., Vol. 36, p. 105.

<sup>4</sup> *Notes on the Iroquois*, p. 358.

<sup>5</sup> "Art in Shell," p. 239.



of none ; west of this they are absolutely unknown.”<sup>1</sup> Hutchison, in his *History of Massachusetts* says “ the Indian residents northeastward of the province of New York had originally no knowledge of this sort of medium or trade.”<sup>2</sup> Lewis H. Morgan also doubts whether the earlier Indians used it as currency.<sup>3</sup> But Holmes says, “ The great body of our historical evidence goes to show, however, that a currency of shell was in use among the Atlantic coast tribes when first encountered by the Europeans ; ” and in another passage he maintains that the wampum industry was not introduced by the Europeans as some think. There is no question, however, but that the arrival of Europeans gave an impetus to the trade, especially after the introduction of machinery, whereby wampum was made more quickly. Loskiel asserts that the old wampum even was entirely disused. His words are worth quoting in this connection. “ Before the Europeans came to North America,” he says, “ the Indians used to make their strings of wampum chiefly of small pieces of wood of equal size, stained either black or white. Few were made of muscles, which were esteemed very valuable and difficult to make ; for, not having proper tools, they spent much time in finishing them, and yet their work had a clumsy appearance. But the Europeans soon contrived to make strings of wampum, both neat and elegant, and in great abundance. These they bartered with the Indians for other goods, and found this traffic very advantageous. The Indians immediately gave up the use of the old wooden substitutes for wampum, and procured those of muscles, which, though fallen in price, were always accounted valuable.”<sup>4</sup>

This shell-money appears to have been in use from Canada to Florida, and even as far south as Central America.

It is in its mnemonic use, however, that shell wampum has come into special prominence.

Holmes treats the subject in an admirable manner in his “ Art in Shell,” and his remarks are worth quoting.

“ The wampum records of the Iroquois were generally in the form of belts, the beads being strung or woven into patterns formed by the use of different colors. By association simply they were made to record history, laws, treaties, and speeches—a fact, a law, a stipulation, or a declaration being ‘ talked into ’ a particular part or pattern of the design with which it was ever afterwards associated, thus giving additional permanency to tradition and bringing it one step further forward in the direction of written records. Such records were, of course, quite useless without the agency of an interpreter. Among the Iroquois, according to Dr. Morgan, one of the Onondaga sachems was made hereditary ‘ Keeper of Wampum,’ whose duty it was to be thoroughly versed in its interpretation. But knowledge of the contents of these records was not confined to the Keeper, or even to the sachems. At a certain season each year the belts were taken from the treasure-house and exposed to the whole tribe, while the history and import of each was publicly recited. This custom is kept up to the present day. It is recorded by Rutenber that among the Mohicans a certain sachem had charge of the bag of peace which contained the wampum belts and strings used in establishing peace and friendship with the different nations.”<sup>5</sup>

<sup>1</sup> Burrows Ed., *Relations*, Vol. 3., p. 314 ; *Intro*.

<sup>2</sup> Vol. I., p. 406 ; *apud* Holmes.

<sup>3</sup> *Opp. cit.*, p. 71.

<sup>4</sup> Loskiel : *History of the Mission of the United Brethren among the Indians in North America*, translated by C. I. La Trobe, (London, 1794), Book I., p. 26.

<sup>5</sup> Rutenber : *Indian Tribes of the Hudson River*, p. 43.

"Aside from records wampum was used in the form of strings and belts for a variety of purposes; some of them were probably mnemonic, others only partially so, being based either upon its association with the name of some chief or clan; or upon a semi-sacred character resulting from its important uses. It was employed in summoning councils, and the messenger who journeyed from tribe to tribe found in it a well-recognized passport. When a council was called it was presented by the delegates from the various tribes as their credentials; it was used in the ceremony of opening and closing councils, as was also the calumet; it assisted in solemnizing oaths and in absolving from them; white, it was a messenger of peace; black, it threatened war, and covered with clay, it expressed grief. 'White wampum was the Iroquois emblem of purity and faith, it was hung around the neck of the white dog before it was burned; it was used before the periodical religious festivals for the confession of sins, no confession being regarded as sincere unless recorded with white wampum; further than this, it was the customary offering in condonation of murder, although the purple was sometimes employed. Six strings was the value of a life, or the quantity sent in condonation, for the wampum was rather sent as a regretful condonation of the crime, with a petition for forgiveness, than as the actual price of blood.'<sup>1</sup> We readily recognize the influence of the Christian missionary, in a number of these symbolic uses of wampum.

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"The great profusion of wampum used in some of the later treaties is a matter of surprise. In a council held between four Indian ambassadors from New England and the French, thirty-six large belts were given by the ambassadors to thank them that their people had not been treated with hostility."<sup>2</sup>

\* \* \* \* \*

"Lafitau, whose statements are considered unusually trustworthy, as they were based chiefly on personal observation of the Indian tribes of Canada, gives the following very instructive account of the mnemonic use of wampum:

"'All affairs are conducted by means of branches [strings] and necklaces [belts] of porcelain [wampum], which with them take the place of compacts, written agreements, and contracts. . . . The shell, which is used for affairs of state, is worked into little cylinders of a quarter of an inch in length and large in proportion. They are distributed in two ways: in strings and in belts. The strings are composed of cylinders threaded without order one after another, like the beads of a rosary; the beads are usually quite white, and are used for affairs of little consequence, or as a preparation for other more considerable presents.

"'The belts are large bands, in which little white and purple cylinders are disposed in rows, and tied down with small thongs of leather, which makes a very neat fabric. The length and size and color are proportioned to the importance of the affair. The usual belts are of eleven rows of a hundred and eighty beads each.

"'The 'fisk,' or public treasure, consists principally of these belts, which, as I have said, with them take the place of contracts, of public acts, and of annals or registers. For the savages, having no writing or letters, and therefore finding themselves soon forgetting the transactions

<sup>1</sup> Morgan, *opp. cit.*, p. 73.

<sup>2</sup> *History and Description of New France*, Vol. II., p. 256.

that occur among them from time to time, supply this deficiency by making for themselves a local memory by means of words which they attach to these belts, of which each one refers to some particular affair or some circumstance, which it represents while it exists.

“They are so much consecrated to this use that, besides the name *Gaionni*, which is their name for the kind of belts most used, they bestow that of *Garihona*, which means a transaction; that of *Gaouenda*, voice or word, and of *Gaiandereñfera*, which means grandeur or nobility; because all the affairs dignified by these belts are the endowment and province of the *agoianders* or nobles. It is they who furnish them; and it is among them that they are redivided when presents are made to the village and when replies to the belts of their ambassadors are sent.

“The *agoanders* and the ancients have, besides this, the custom of looking over them often together, and of dividing among themselves the care of noting certain ones, which are particularly assigned to them; so that in this way they do not forget anything.”

“Their wampum would soon be exhausted if it did not circulate; but in almost all affairs, either within or without, the law requires a reply, word for word, that is to say, for one belt one must give another, to be of about the same value, observing, however, a slight difference in the number of beads, which must be proportioned to the rank of the persons or nations with which they treat.

“They do not believe that any transaction can be concluded without these belts. Whatever proposition is made to them, or reply given them, by word of mouth alone, the affair falls through they say, and they let it fall through very effectually as though there had been no question about it. Europeans, little informed or little concerned about their usages, have slightly inconvenienced them on this point in retaining their belts without giving them a similar response. To avoid the inconvenience which might arise from this they acquired the style of giving only a small quantity, excusing themselves on the plea that their wampum was exhausted; and they supplied the rest with packages of deer-skin, in return for which they were given trinkets of small value, so that transactions between Europeans and them have become a sort of trade.

“Although all the savage nations of America make various kinds of ornaments of shells, I believe that it is only those of North America who employ them in transactions. I cannot even affirm that all of these do.”<sup>1</sup>

Loskiel<sup>2</sup> also gives a good account, which is as follows: “Four or six strings joined in one breadth, and fastened to each other with fine thread, make a *belt of wampom*, being about three or four inches wide, and three feet long, containing, perhaps, four, eight, or twelve fathom of wampom, in proportion to its required length and breadth. This is determined by the importance of the subject which these belts are intended either to explain or confirm, or by the dignity of the persons to whom they are to be delivered. Everything of moment transacted at solemn councils, either between the Indians themselves or with Europeans, is ratified and made valid by strings and belts of wampom. Formerly they used to give sanction to their treaties by delivering the wing of some large bird; and this custom still prevails among the more western nations, in transacting business with the Delawares. But the Delawares themselves, the Iroquois, and the nations in league with them, are now sufficiently provided with

<sup>1</sup>Lafitau: *Mœurs des Sauvages Américains*, 1724, Tome II., pp. 502-503 and 506-507; *apud* Holmes, p. 240, *et seq.*

<sup>2</sup>*Missions of the United Brethren*, Book I., p. 26.



handsome and well-wrought strings and belts of wampom. Upon the delivery of a string, a long speech may be made and much said upon the subject under consideration, *but when a belt is given few words are spoken*; but they must be words of great importance, frequently requiring an explanation. Whenever the speaker has pronounced some important sentence, he delivers a string of wampom, adding, 'I give this string of wampom as a confirmation of what I have spoken;' but the chief subject of his discourse he confirms with a belt. The answers given to a speech thus delivered must be confirmed by strings and belts of wampom, of the same size and number as those received. Neither the color nor the other qualities of wampom are a matter of indifference, but have an immediate reference to those things which they are meant to confirm. The brown or deep violet, called black by the Indians, always means something of severe or doubtful import; but the white is the color of peace. Thus, if a string or belt of wampom is intended to confirm a warning against evil, or an earnest reproof, it is delivered in black. When a nation is called upon to go to war, or war declared against it, the belt is black, or marked with red, called by them the *colour of blood*, having in the middle the figure of an hatchet in white wampom. . . . They refer to them as public records, carefully preserving them in a chest made for that purpose. At certain seasons they meet to study their meaning, and to renew the ideas of which they were an emblem or confirmation. On such occasions they sit down around the chest, take out one string or belt after the other, handing it about to every person present, and that they may all comprehend its meaning, repeat the words pronounced on its delivery in their whole convention. By these means they are enabled to remember the promises reciprocally made by the different parties; and it is their custom to admit even the young boys, who are related to the chiefs, to their assemblies; they become early acquainted with all the affairs of State; thus the contents of their documents are transmitted to posterity, and cannot be easily forgotten."

Holmes says further; "The beads chosen as most convenient for stringing or weaving into fabrics were small cylinders from one-eighth to one-quarter of an inch in diameter, and from one quarter to one-half an inch in length. White strings or belts were sufficient for the expression of simple ideas or the association of simple facts, but the combinations of colors in patterns rendered it possible to record much more complicated affairs. In belts used for mnemonic purposes the colors were generally arranged without reference to the character of the facts or thoughts to be intrusted to them, but in a few cases the figures are ideographic, and are significant of the event to be memorized. Strings cannot be utilized in this way.

"*Wampum in Strings*.—From Mr. Beauchamp's notes I have compiled the following brief account of the use of strings of wampum among the modern Iroquois. Six strings of purple beads united in a cluster represent the Six Nations. When the tribes meet the strands are arranged in a circle, which signifies that the council is opened. The Onondagas are represented by seven strings, which contain a few white beads; the Cayugas by six strands, all purple, and the Tuscaroras by seven strands, nearly all purple. The Mohawks have six strings, on which there are two purple beads to one white. . . . There are four strings in the Oneida cluster; these contain two purple to one white bead. The Senecas have four strings, with two purple beads to one white. The three nations which were brothers are represented by similar clusters.

"When a new chief is installed, the address delivered on the occasion is 'talked into' ten very long strings of white wampum. Three strings, mostly white, represent the name of the new chief. . . . When a chief dies he is mourned on ten strings of black wampum. If he has merely lost his office, six short strings are used.

"According to Mr. Beauchamp, possession of beads gives authority, and they are also used as credentials, or, as the Indians express it, 'Chief's wampum all same as your letter.' Such of these strings as remain in existence are still in use among the Iroquois, and are considered very precious by them, being made of antique hand-made beads.

"In the literature relating to our Indian tribes, we find occasional reference to the use of strings of wampum in ways that indicate that they were invested with certain protective and authoritative qualities, doubtless from their association with the name of some chief, clan, or tribe.

"It is recorded that on one occasion, Logan, the Mingo chief, saved a captive white from torture by rushing through the circle of Indians and throwing a string of wampum about the prisoner's neck. Through the virtue of this string he was enabled to lead him away and adopt him into his family."<sup>1</sup>

Nothing further can be added to this interesting account except a note explanatory of "branches" of wampum, which is of interest in connection with the above.

"Opinions differ as to the meaning of the term 'branches of porcelain.' Holmes translates it 'strings,' as used by Lafitau; but he says that the latter's use of this and other terms is somewhat confusing. Slafter (*Prince Champlain*, Vol. III., p. 150, *note*) says that 'branches were strings of white shells,' as distinguished from the purple. E. E. Taché thinks that they were twigs or sticks strung with large beads to represent ropes. Crawford Lindsay has seen, among old specimens of wampum, small beads strung on a long thread which was closely wound round a pliable stick or twig. He also mentions information given him by an educated Indian from Lorette, 'who says that he has frequently seen these porcelain branches. They consist of large beads strung on the fiber of the *ortie* (*urtica*, the nettle),—which is very tough, and which the squaws treated like flax, making from it strong threads,—or on slender thongs of caribou hide. Several of these branches are united on one stem, like the twigs of a tree-branch. Each he says, represents a *parole*, or *word*, of a discourse.' Dionne thinks that beads were strung upon the branches of a twig, which, being pliable, would simulate the withes used in binding prisoners."<sup>2</sup>

In plate xx. is shown one of these strings of wampum, which is in the Provincial Museum. For a description the reader must be referred to the *Archæological Report* for 1904 (p. 48). We have only one Iroquois wampum belt. This is traditionally regarded as not less than three hundred years old. It was buried with others for safe-keeping during the colonial war. The beads composing it are mostly white with several oblique bars of the purple variety, and these may have had some special significance.

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<sup>1</sup> "Art in Shell," pp. 247-248.

<sup>2</sup> Burrows Ed. *Jesuit Relations*, Vol. 27, p. 315; *note*.

## V. SHELLS IN ABORIGINAL COMMERCE.

It will now also be necessary to devote a little attention to aboriginal trade in whole shells. The presence of such shells as the *Busycon*, *Strombus*, and other varieties so far from their native habitat is one of the best evidences we have that relations more or less intimate existed between the widely separated tribes on this continent during prehistoric times. Thurston, in his *Antiquities of Tennessee*, says that "The ancient villagers of the Cumberland and Tennessee valleys must have been industrious and thrifty travelers and traders to have been able to bring or import from the far Gulf or South Atlantic coasts, by purchase or exchange, the vast number of articles manufactured from marine shells."<sup>1</sup> But how much more remarkable is it that these shells should even have reached Canada !

The shells of the *Busycon perversum* were most extensively used in this aboriginal commerce, and have been transported to great distances, being found in such widely separated localities as Tennessee, Ohio, Ontario, Michigan, Illinois, and Iowa. Professor Holmes says : "It is obtained along the Atlantic and Gulf coasts from Massachusetts to Mexico, and within the United States it is artificially distributed over the greater part of the Atlantic slope."<sup>2</sup> According to Sir Daniel Wilson the native habitats of *Busycon perversum* "are the Antilles, and the Bay of Campeachy on the mainland."<sup>3</sup> He says further, "It is obvious from the large and cumbrous size of the American *pyrula*, that they must have possessed some peculiar value or sacredness in the estimation of the Indian tribes of the northern regions, to encourage their transport from so great a distance through regions beset by so many impediments to direct traffic. Their transport to the Canadian lake regions appears to have been practised from a very remote period."<sup>4</sup> Mr. Boyle, also, in his *Notes on Primitive Man in Ontario*, says : "Ancient commerce with the south for large shells would seem to have exceeded that with the northwest for catlinite and copper, if we judge from what is exhumed, and notwithstanding the immense value that a large southern shell must have possessed by the time it reached this country, we occasionally find one or more<sup>5</sup> of them in graves, from the shores of Lake Erie to the Georgian Bay. It would not be an unfair comparison to estimate one as the equivalent of a gold watch, and yet they are placed side by side with the remains of departed braves."<sup>6</sup>

Dr. Wilson also reports *Busycon spirata* from an ossuary in Beverly township ; which species he says is "peculiar to the western coasts of Central and South America." Considering the great distance, how long a time must it not have taken before it finally reached Canada.

Rau, mentions the fact that "unwrought columellæ of large sea-shells have been found at considerable distances from the coast, as, for instance, in Ohio and Tennessee."<sup>7</sup>

<sup>1</sup> P. 309.

<sup>2</sup> "Art in shell," p. 192.

<sup>3</sup> "Observations suggested by specimens of a class of Conchological Relics of the Red Indian Tribes of Canada West, *Canadian Journal*, Vol. III., 1854-1855, p. 156.

<sup>4</sup> *Ibid.*, p. 157.

<sup>5</sup> According to Dr. Wilson, sixteen of these shells were found in a single ossuary in Oro township, Simcoe county.—*Canadian Journal* (second series, Vol. III., 1858), p. 399.

<sup>6</sup> P. 65.

<sup>7</sup> "Ancient Aboriginal Trade," p. 376.



*Marginella*, *Natica* and *Oliva* shells were found in the mounds of Ohio by Messrs. Squier and Davis. *Marginella* shells were also discovered in an Illinois mound.

A broken valve of *Mytilus edulis*, from the Atlantic coast, was found on a village site in Victoria county. This is now in the Laidlaw collection in the Museum.

We have another illustration of the wide extent of this aboriginal commerce in shells, in the finding of *dentalium* or tusk shells in mounds of the Mississippi valley. These were undoubtedly obtained from the Indians of the Pacific coast; or, if these dentalia were natives of the West Indies, they may have reached Ohio through the Indians of the southern coasts of the United States.

Rau says that "more than a hundred years ago, it was noticed by Carver that sea-shells were much worn by the Indians of the interior parts—he chiefly refers to the Dakotas of the upper Mississippi—and reckoned very ornamental."<sup>1</sup>

Professor Holmes accounts for the origin of the trade in shells by assuming that these objects worn as ornaments were transported "to distant places by wandering tribes, exchanges would take place with other tribes, and finally a trade would be developed and a future commerce of nations would be inaugurated."<sup>2</sup>

Many of these shells, and the ornaments wrought from them, also may have been reprisals in warfare. It is well known that some tribes of the modern Indians made frequent warlike incursions into the country of their enemies, often over a thousand miles away. "Bands of Iroquois from central New York," says Thurston, "came all the way down the tributaries of the Ohio in their light canoes, and up the winding Cumberland, to enjoy the pleasure of pillaging and burning the houses of the less warlike Shawnees near Nashville. They sometimes pursued the Cherokees and Chickasaws to the banks of the Tennessee River."<sup>3</sup> Rau speaks of six hundred warriors of the Seneca tribe, who, in 1680, "invaded the territory of the Illinois, among whom La Salle sojourned just at that time, preparing to descend the Mississippi to the Gulf of Mexico. More than a hundred years ago, the traveller Carver learned from the Winnebagoes (in the present state of Wisconsin) that they sometimes made war-excursions to the south-western parts inhabited by Spaniards (New Mexico), and that it required months to go there." Rau concludes from this that "Similar excursions and migrations, of course, took place during the early unknown periods of North American history. In the course of such enterprises the property of the vanquished naturally fell into the hands of the victors, who appropriated everything that appeared useful or desirable to them. The consequence was an exchange by force—if I may call it so—which caused many of the manufactures and commodities of the various tribes to be scattered over the face of the country."<sup>4</sup>

A considerable impetus was given to the shell trade by the arrival of the Europeans on this continent, many of whom were soon engaged in it. Cabeça de Vaca was one of these early traders. In his *Relation* he tells us that he supported himself chiefly by trading, among other things, in flints, skins, sea-beans, mineral paint, pieces and "hearts" of sea-shells, shells used as cutting implements, and a smaller kind which passed as

<sup>1</sup> Opp. cit., p. 374.

<sup>2</sup> "Art in Shell," p. 188.

<sup>3</sup> "Antiquities of Tennessee," p. 83.

<sup>4</sup> Opp. cit., p. 349.

currency. He sometimes penetrated the country to a distance of forty and fifty leagues from the coast. The "hearts" of the shells were, of course, the columellæ. In much more recent times white traders have carried on this trade with the interior tribes, with considerable profit to themselves. Kohl, speaking of the Ojibways, on Lake Superior, says: "If the traders brought a large handsome periwinkle and held it to the Indians' ears, the latter were astonished, and said they could hear the sea beating in it, and would pay for such a miraculous shell, peltry to the value of forty or fifty dollars. There were also varieties of shells which they held in special repute: thus there was a long shell of the size of a finger, which in the Indian trade was worth more than its weight in silver."<sup>1</sup>

#### CONCLUSION.

In the foregoing the writer has endeavoured to treat of everything in the line of shell, not even excepting the apparently insignificant objects, for in such a study as archæology we must recognize the enormous importance of these relics by the hand of man attracts our attention, and from this infant stage of the art until the highest and most elaborate forms are reached they have the deepest interest to the student of human progress."<sup>2</sup>

This detailed treatment also had another purpose—namely, to bring to those searchers in the field the importance of preserving everything they find. Explorations are too often conducted in a perfunctory manner, and often by inexperienced collectors, who are more on the lookout for rarities than the commoner objects, and thus a great many interesting facts, which might be deduced from such finds, are lost to science. Especially is this true of land and fresh-water shells, which seem to be ignored by most collectors.

We have also endeavoured to present numerous extracts from the early writers and explorers on this continent; which, although quite familiar to professional archæologists, are nevertheless not accessible to a large number of readers of these reports—especially those not in touch with our larger metropolitan libraries.

It only remains to express our acknowledgments to Hon. F. R. Latchford, K.C., for kindly identifying most of the *Unios* and oceanic shells herein mentioned, and also to Dr. W. M. Beauchamp, Dr. A. L. Kroeber and Professor Holmes for information furnished. Our thanks are also due to Miss Elizabeth J. Letson, Ph. D., of Buffalo, for identifying *Olivella oryza* mentioned on p. 67.

<sup>1</sup> J. G. Kohl: *Kitchi Gami* (London, 1860), p. 135.

<sup>2</sup> "Art in Shell," p. 188.

*THE KILLING OF WA-SAK-APEE-QUAY BY PE-SE-QUAN,  
AND OTHERS.*

In the introductory remarks on "The Killing of Moostoos the Wehtigo," in our Report for 1903, p. 126, it was stated that the extracts were "presented as an ethnological, and, to some extent, as a psychological contribution rather than as a legal one." It would have been preferable had I said *purely*, instead of "to some extent," omitting any reference to "a legal" value, for of this it is devoid.

The evidence adduced as follows, in the trial of the Cree Indian, Pesequan, for the murder of his wife, Wa-sak-apee-quay, as a Wehtigo, although this word does not appear to have been used during the trial, brings out some new features in connection with Indian belief and superstition, and will be found interesting mainly for this reason.

Pesequan was sentenced to be hanged, but was subsequently reprieved, to undergo life imprisonment.

IN A STIPENDIARY MAGISTRATE'S COURT OF THE NORTH-  
WEST TERRITORIES.

Before Mr. Commissioner Perry and a special jury.

His Majesty the King *vs.* Joseph Fiddler.

In the Council Chamber of the Hudson's Bay Company's Post, Norway House, in the District of Keewatin, in the Northwest Territories of Canada, at nine o'clock in the morning of Monday, the seventh day of October, 1907.

INDICTMENT FOR MURDER.

Superintendent W. H. Routledge, acting Sheriff of the Northwest Territories.

Mr. D. W. McKerchar appeared for the Attorney-General of Canada.

Mr. C. Crompton Calverley watched the case on behalf of the Indian Department.

Constable J. A. W. O'Neill, Clerk of the Court.

Mr. James Kirkness and Mr. William Crait sworn as interpreters (Mr. Crait did not act).

Mr. H. Ferguson sworn as stenographer.

On his arraignment the prisoner, the said Joseph Fiddler, an Indian and known among the Indians as Pesequan, pleaded guilty, and the Crown Counsel requested that a plea of not guilty be entered, considering the exigencies of the case; whereupon the Commissioner directed that a plea of not guilty be entered accordingly.

At this stage of the proceedings the Court adjourned until 10 o'clock, when the trial commenced before Colonel A. Bowen Perry, Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, powers and authority of a stipendiary magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Act, 1907; and the following special jury was impanelled: Charles A. Wilkins (foreman), Harry Wright, James Garson, James Bagge, William Murray Chapman and Hans Christian.



JOHN ARTHUR WILLIAM O'NEILL, having been duly sworn, deposed as follows :

To Mr. MCKERCHAR :

Q.—What is your occupation? A.—Constable in the Royal North-west Mounted Police.

Q.—Do you know the prisoner, Joseph Fiddler? A.—Yes.

Q.—When did you first meet him? A.—On the 15th day of June, 1907.

Q.—Where was it at? A.—At Red Deer Lake, in the District of Keewatin, very near Manitoba, as far as I could judge by maps that I have seen.

Q.—What were you doing at Red Deer Lake? A.—I made the journey to investigate rumors of murders which were said to have occurred there in the previous year.

Q.—What was the result of your visit? A.—I went with Constable Cashman. As a result of investigations we found that the prisoner had killed a woman named Mrs. Thomas Fiddler about the first of September, 1906.

Q.—And as a result of your belief that murder had been committed, what did you do? A.—We arrested Joseph Fiddler and charged him with this murder; knowing that it was useless to give him the usual warning in cases of this kind, we warned him not to say anything at all until he was brought to trial at Norway House.

COMMISSIONER : What was the date of the arrest? A.—The fifteenth of June, 1907.

Mr. MCKERCHAR : Do you know where Sandy Lake is? A.—Yes.

Q.—You visited that district also? A.—Yes.

Q.—In what direction is it from Red Deer Lake? A.—It is north-west. The whole of the lake is in the District of Keewatin. We found him, the prisoner, in the camp with his brother John at Red Deer Lake.

Q.—During the time that you were out there in that district did you meet any missionary or white man among the band? A.—No.

Q.—There was no one there to instruct them? A.—No one.

WILLIAM JOHN CASHMAN having been duly sworn, deposed as follows :

To Mr. MCKERCHAR :

Q.—What is your occupation? A.—A constable in the Royal North-west Mounted Police.

Q.—Do you know the prisoner? A.—Yes.

Q.—When did you first see him? A.—On the 15th of June, 1907, at Red Deer Lake. Constable O'Neill was with me at the time.

Q.—State briefly what happened? A.—I left here on a patrol and met Constable O'Neill down on the lake and we travelled from Sandy to Red Deer Lake, and from evidence they had heard Constable O'Neill arrested Joseph Fiddler. We brought him to Norway House.

Q.—Where is Red Deer Lake located? A.—It is situated in the District of Keewatin.

Q.—How far is Sandy Lake from Norway House? A.—In the winter it is a journey of about 320 miles. By the way we came back I should think it would be about 500 or 600 miles.

Q.—Did you meet any other people out there except the members of the band? A.—No.

Q.—How far from that point was it that you met any white men?

A.—At Island Lake; it is a 120-mile journey in the winter and 200 miles in the summer.

Q.—Who were the white people? A.—Mr. Campbell, in charge of the Hudson's Bay Company's post there, and Mr. McKersie, Methodist school teacher.

OWL RAE, having affirmed, deposed as follows :

To Mr. MCKERCHAR :

Q.—What is your name? A.—Norman Rae.

Q.—What is your Indian name? A.—Na-po-quan-i-as, or nick-name, Mi-no-wa-pa-win or Eyelids.

Q.—Where do you live? A.—At Goose Lake.

Q.—Where is Goose Lake? A.—Goose Lake is a branch of Sandy Lake.

Q.—Do you know the prisoner? A.—Yes.

Q.—What is the prisoner's name? A.—I know his nick-name : Sandy. Pesequan is his Indian name.

Q.—Have you ever heard him called any other name besides those two? A.—No.

Q.—Have you ever heard him called Joseph Fiddler? A.—I heard O'Neill call him Joseph Fiddler, but nobody else.

Q.—Do you belong to the same band as the prisoner? A.—No, I belong to a different band.

Q.—What is the name of the band to which you belong? A.—The Crane band.

Q.—To what band does the prisoner belong? A.—I do not know.

Q.—To what band does your wife belong? A.—She belongs to the Sucker band.

Q.—Who is your wife's father? A.—The prisoner is her father.

Q.—Do you know the prisoner's son, Thomas Fiddler, who has been called here Thomas Fiddler? A.—Yes.

Q.—Do you know Thomas Fiddler's wife? A.—Yes.

Q.—What was her Indian name? A.—Wa-sak-apee-quay.

Q.—When did you last see her? A.—Last summer.

Q.—The summer that has just gone or the one before? A.—Earlier than this summer.

Q.—One summer earlier than this summer; what part of the summer was it? A.—About the middle of the summer.

Q.—Where was she at the time you last saw her? A.—She was at Sandy Lake, a little on this side of the Hudson's Bay Company's post.

Q.—Was she in her own camp at the time? A.—No.

Q.—Where was she? A.—I was there at Sandy Lake at the time visiting, and while I was there they brought the woman from some other place.

Q.—Who brought her? A.—The prisoner and his son Thomas brought her.

Q.—Is that the husband's name? And is that the husband of the woman? A.—Yes.

Q.—When they brought her to this camp what did they do with her? A.—When they arrived there they had two sticks and laid her on them and carried her up to the wigwam.

Q.—Was she ill at the time? A.—She was very sick then; she would not lie quiet.

Q.—Did they do anything with her to make her lie quiet? A.—They held her down.

Q.—How many were holding her down? A.—I could not tell how many; a lot of them.

Q.—More than the two that brought her in? A.—I cannot tell you how many held her down. There were more than the two who brought her. She was not in the wigwam at all. They left her outside. She was brought to the wigwam and they left her outside.

Q.—Did they put her in a wigwam by herself or with the others? A.—She was not in the wigwam and they left her outside.

Q.—How long did you remain at the camp that time? A.—They brought that woman late in the evening and I was there all the time until the next morning.

Q.—Did you leave the next morning? A.—The next morning I went to my work at the Company's place at Sandy Lake.

Q.—Did they have to hold her down during the whole of the night until you left in the morning? A.—Sometimes during the night I saw people holding her down. Thomas Fiddler was holding her down and sometimes I helped him during the night.

Q.—Were you the only two who helped to hold her down during the night? A.—Just the two of us were holding her down. The prisoner was there.

Q.—He took no part in holding her down? A.—No.

Q.—Did they take her into the wigwam or did they leave her outside all night? A.—They kept her outside during the night.

Q.—Did the rest of the band retire to the wigwam excepting Thomas Fiddler and the prisoner? A.—Where this woman was Joseph Fiddler and all his family had camped there, not in the wigwam, but outside.

Q.—Tell us how many there were in that family? A.—I cannot tell.

Q.—Could you tell what her appearance in the face was that night? A.—I did not know of any difference in appearance.

Q.—Could you recognize any difference in forms of sickness? A.—No.

COMMISSIONER: Was she sick? A.—I could not tell whether she was sick; anyway she was delirious and she could not keep quiet.

Mr. McKERCHAR: Q.—Did she try to do any harm to any one in the camp? Did she attempt to hurt any one? A.—No. She could not hurt any one anyhow. She was that weak.

Q.—Did she scream or make any noise? A.—She was not screaming or anything like that, but she was trying to talk all the time. Sometimes we could not understand what she said.



Q.—You went away in the morning to work for the Company; when did you come back again? A.—I could not tell you whether it was at sunset or before sunset. It was very late. It was on the same day.

Q.—Did you see this woman on your return? A.—When I came back I did not see the woman. She was taken away then.

Q.—Where was she taken to? A.—A little to one side to where she was before.

Q.—Did you see her, where she had been taken to? A.—I went over during the night and saw where she was taken to.

Q.—Was she still delirious? A.—Yes.

Q.—Did she have to be held down when you saw her then? A.—When I went there nobody held her down and the prisoner had a string with the other man, the chief. The string was in their hands and the woman was lying there.

Q.—Was anyone holding her down? A.—No.

Q.—She was just lying still on the ground? A.—She was lying on the ground, but they had spread the cotton on the ground and laid the woman on it.

Q.—She was in that position when you first saw her at that time? A.—Yes.

Q.—What happened then? A.—Of the cotton she was lying on they pulled up the end of it and put it round her neck and they got the string in one knot or noose and strangled her. (Witness explains to the interpreter and to the court and by motions round his neck how the woman was strangled.)

Q.—Who was it that took the cord and strangled her? A.—The chief and the prisoner Joseph.

Q.—What was the chief's name? A.—Jack.

Q.—Did you see her at any time after she had been strangled? A.—I saw the body after that.

Q.—Where and under what circumstances? A.—I saw the body lying with the string round the neck and I went home and left the body there.

Q.—Before they put this cotton and string round her neck and while she was lying on the ground, did she say anything; was she talking? A.—I heard her say something, but I do not know what she said.

Q.—Did you return to the place where the body was after leaving it at that time? A.—Yes, I went there the next morning.

Q.—What did you see or what did you do? A.—I saw the body lying there again.

Q.—What became of the body after that? A.—I went over there in the morning and I saw the body lying there sewed up in cotton.

Q.—What became of it after that? A.—When we got there, Chawnee, or Sandy the prisoner told me that I had to take the body over to the Company's place and bury it there.

Q.—What did you do? A.—I dug the grave and after I had done the digging I put birch-bark in the bottom. Then I got sticks and put across the body and more birch-bark on top of the body, and I put earth on it.

Q.—Who was with you? A.—I only had a boy with me. I had the grave nearly finished when Thomas Fiddler came.

Q.—Did you and the boy take the body to the Hudson's Bay Company's post? A.—Yes, the boy and I buried the body.

Q.—Any one else with you? A.—No.

Q.—At the time that the prisoner and the chief strangled the woman was there anyone else there except you? A.—There were three looking on.

Q.—Who were the three looking on? A.—Angus Rae was there, but was not there at the time that the string was pulled.

Q.—Who was the other? A.—A brother of Angus, John Rae.

Q.—Where is he now? A.—The last time I saw him he was at Red Deer Lake.

Q.—Angus Rae is also a prisoner, and you can see him here in this court room? A.—Yes.

Q.—Who was the third man? A.—Myself.

Q.—Were there any others around there? A.—No, no others. When the two of those old fellows pulled the string only two were there, John and I. John Rae and I.

Q.—When did Angus come there—before or after they pulled the string? A.—Before the string was pulled.

Q.—And did he come back afterwards? A.—I do not know. As soon as they had strangled the woman I left—immediately the string was pulled.

Q.—Was there any one with you when you went back in the morning and found the body sewed up in cotton? A.—The father and the mother of the woman were there.

Q.—Any one else while you were present? A.—Nobody else.

Q.—Who were the father and mother of this woman; were they members of this band or members of some other band? A.—They belonged to the Sucker band.

Q.—When the prisoner asked you to bury the body was there any one else with you? A.—When the prisoner told me to go and bury the woman I was in the wigwam and everybody in the band heard him.

Q.—Where is the boy now who helped you to bury the woman? A.—The last time I saw the boy he was at Red Deer Lake.

Q.—Was he a member of the Sucker band? A.—Yes.

Q.—Do you know why the prisoner and Chief Jack strangled this woman? A.—I do not know why they strangled that woman.

Q.—Did you hear any one ask him to do so? A.—No.

Q.—Did you hear anything said about strangling her before you saw the chief and the prisoner Joseph in the act? A.—No. It was the first time that I knew anything about it when I saw them strangling the woman.

Q.—Did the accused Joseph ever say anything about them doing the strangling? A.—No, I never heard any words about it.

Q.—During that night when the whole family was gathered there was there anything said about putting her to death? A.—I never heard anything about it until I saw the string round her neck.

Q.—Did you hear any one raise any objection to putting this woman to death? A.—No.

Q.—Do you know of any others of that tribe in that vicinity having been put to death in the same way? A.—I heard of them doing that.

Q.—Do you know why they do it?

A.—They were scared that when they are sick that they will turn out to be cannibals, man-eaters, and will destroy them. That is what they do it for.

Q.—What class of sick people do they put to death in that way? A.—I do not know.

Q.—How do they decide when it is necessary to put a person to death on account of illness? A.—I do not know how it is decided.

Q.—Why did you not object to them putting her to death when you saw them strangling her? A.—I might have said something—I do not know what the law is.

Q.—Was this a law of the band that was being carried out? A.—That is the law from what I heard.

Q.—From whom did you hear it? A.—I don't know—everybody said it.

Q.—It is a matter of general conversation amongst the tribes? A.—Yes.

Q.—Do you know anything about the white man's laws? A.—No.

Q.—Have you ever been taught to distinguish between what is right and what is wrong? A.—No, I have never been taught.

Q.—Have you ever seen a white man before this time of coming out to Norway House? A.—I have seen a white man come down sometimes to Island Lake.

Q.—Did any white men ever speak to you about right and wrong, or did they have it translated to you? A.—No, I never spoke to them at all.

Q.—Did you ever speak to them about anything else? A.—No.

Q.—Did you ever hear a missionary or speak to one? A.—I saw a missionary at Sandy Lake once.

Q.—Did you hear him speak or hear what he said? A.—Yes.

Q.—Was it to the Sucker or Crane band that he was speaking? A.—I cannot remember that. I saw a missionary but I do not know which band he was speaking to.

Q.—You do not know who were there? A.—There were lots of people there.

Q.—Was the prisoner or the chief of the Sucker band there? A.—I do not know. I hardly remember. I cannot tell who were there. I do not know whether they were there or not.

COMMISSIONER: Q.—You stated that the chief and the prisoner Joseph were present at the strangling. Did the prisoner say anything while he was doing the strangling, either to the chief or to the woman? A.—After they strangled the woman the prisoner and the chief were talking, saying that they would do the right thing by the woman and would bury her right.

Q.—Did they say anything else? A.—No.

Q.—Did they say anything before they strangled her? A.—I did not hear them say anything.

Q.—Did they say anything to her while they were strangling her? A.—No.



Q.—Did they make any signs or incantations or hold any rites or perform any ceremonies? A.—The woman said something, but I did not understand her.

Q.—Did the prisoner answer her? A.—The woman was not talking to any one; she was just talking.

Q.—Did she struggle? A.—She did not do anything nor did she do any struggling.

Q.—Were her hands tied? A.—No.

Q.—How long were you there before they put the cotton round her neck to strangle her? A.—When I got there they had the string there and they were working at it while I was there and the woman was dead when I left.

Q.—Did you hold any part of the woman? A.—When they were to pull on the string to strangle her they asked me to hold her down, and they, the prisoner and the chief, asked me and John Rae to hold her hands down.

Q.—Did she try to get them away from you? A.—Yes, she tried to pull her hands away slowly, but we held her firm.

Witness explains to the court how the woman's hands were held down to her sides, clasping his own wrists in dumb motion.

Q.—On which side of the woman was the chief and on which side was the prisoner? A.—John Rae was on one side.

Q.—And you were on the other; where was the prisoner? A.—The woman was lying towards the south. The chief was on the left hand side of the woman with John Rae and the prisoner was on the right side with me.

Q.—What sort of cotton rag was it? You say that they wrapped a cotton rag round her neck and then put on the string?

Witness describes to the court and through the interpreter and by motions the method of strangulation employed.

A.—Only once they made a knot.

Witness ties a slip-knot and shows it to the jury.

Q.—Who pulled on that? A.—Joseph Fiddler on one end and Jack pulled on the other.

Q.—Until she was dead? A.—Yes.

Q.—Did the woman ask them not to strangle her? A.—No.

Q.—Why did you go back there that night after coming back from the Hudson's Bay Company's post? A.—The people told me that the woman was taken away from where she was and I went over there to see.

Q.—Were you told what she was taken away for? A.—No, I was not told.

Q.—How far away from the wigwam did they take her? A.—About the length of the council chamber of Norway House.

Q.—Was it in the open or was it in the bush? A.—Pretty well cleared except for a little willows on the ground.

Q.—Could they see from the wigwam to where this was going on? A.—They could not see clearly on account of these willows.

Q.—Could they hear the woman calling or crying out when she was strangled? A.—I do not know whether they could hear any noise that she made when they were strangling her.

Q.—Where was the husband, Thomas Fiddler? A.—The husband of this woman was in the wigwam.

Q.—When he came to the grave at the time of the burial by you did the husband remain there any time? A.—He remained there until the body was buried.

Q.—Did you ever see any one else put to death in the same way? A.—I never saw any one else put to death.

Q.—Were you ever in the camp or the wigwam when any one was put to death in that way? A.—No; but I have heard of it.

Q.—Would it be right for you to go and steal from the Hudson's Bay Company at Sandy Lake? A.—No.

Q.—Would it be right for you to go to the Hudson's Bay Company's post and kill the manager there? A.—No.

Q.—Would it be right to kill his wife? A.—No.

Q.—If the manager's wife were sick would it be right to go and kill her, do you think? A.—No.

Juryman BAGG: As far as I can understand him, the witness is holding something back.

COMMISSIONER: Was the woman delirious when she was strangled? Or was she in the same condition as when you first saw her brought to the wigwam as when she was strangled? A.—She was in the same condition when she was strangled as she was when I saw her brought down there.

Q.—At the time of the strangulation was it the prisoner or the chief told you to take hold of the woman's hands? A.—The prisoner told me to hold the woman's hands, that she would be very strong.

Q.—What did he say to the chief? A.—He did not say anything.

Q.—Was that just as soon as you came up? A.—Yes.

Q.—Did the prisoner say anything to you when you came up and saw the woman lying on the cotton? A.—No.

Q.—When the prisoner told you to hold the woman's hands, that she would be very strong, did he tell you what he was going to do? A.—They were just ready to pull the string when the prisoner told me to hold her hands. They were just going to strangle her.

Q.—Did you see them make the preparations for the strangling? A.—Yes.

Q.—Did you not ask him why you were to hold her hands? A.—No.

Q.—Did you know what they were going to do? A.—Yes, I knew.

Q.—Why did you know? A.—When I saw them make ready for what they were going to do.

Q.—Did John Rae say anything to them? A.—I do not know. They did not say anything.

Mr. MCKERCHAR: Q.—Did they have a fire near the body at the time she was strangled? A.—Yes, a camp fire was alongside the woman.

Q.—Could it be seen from the wigwam? A.—Yes.

COMMISSIONER: Q.—After the woman was dead who went away first, John Rae, the chief, or the prisoner? A.—John Rae and the prisoner and the chief were there when I left.

Q.—Where did you go? A.—To the wigwam.

Q.—Did the prisoner go into the wigwam afterwards? A.—Both came in afterwards.

Q.—Did they say anything after they came in? A.—No.

It being lunch time, the court adjourned at this stage of the proceedings to meet again at 2.30 o'clock, when the case was resumed with Norman Rae still in the box.

To the COMMISSIONER :

Q.—You said that this took place during the summer before last; what time in the summer, were the berries ripe? A.—The berries were all ripe.

Q.—Was it cold at night, freezing? A.—I do not remember.

Q.—Do you remember when the interpreter, James Kirkness, arrived at Sandy Lake; did you see the interpreter at Sandy Lake? A.—I do not remember seeing him.

Q.—Before we went to lunch we were questioning you about the return of the chief to the wigwam; did the chief say anything about this in the wigwam? A.—He did not say anything.

Q.—When was it that the prisoner told you to bury the woman? A.—In the wigwam.

Q.—How long after you had returned from where the woman was killed? A.—It was not very long after.

Q.—Were there people in the wigwam when he told you this? A.—Yes, there were.

Q.—Did the prisoner speak out loud so that the others could hear? A.—He was speaking loud enough for everybody to hear, loud enough for anybody to hear.

Q.—When you went back to the tent did the people know that the woman was dead? A.—I do not know whether they knew or not.

Q.—When they heard the prisoner tell you to bury the woman, did they say anything to the prisoner then? A.—Yes, they knew about it.

Q.—Was this in the morning when the prisoner told you to bury the woman? A.—This was in the morning.

Q.—As to the first time, how long afterwards was it when the prisoner came in? A.—I could not tell you how long; it was soon after I came back that he came in. It was not daylight.

Q.—Were the people asleep in the wigwam? A.—There were some lying down and some were sitting up. I do not know whether they were asleep or not.

Q.—Did the prisoner speak to any of them? A.—I do not know.

Q.—Did the chief speak to the others? A.—I do not know whether the chief spoke to them or not. The tent is pretty long; I was at the other end.

Q.—Is your wife any relation to the prisoner? A.—The prisoner is the father of my wife.

Juryman WILKINS asks the following questions through the court:

Q.—How many times have they had a missionary visit them? A.—Once.

Q.—Is that all the times that you remember having seen a missionary? A.—That is the only time.

Q.—Were you ever told that the missionaries knew that this custom was among the people? A.—I do not know what the missionary was saying; I was too small to remember.

Juryman WRIGHT :

Q.—Were her hands up by the young woman's head or were they by her side? A.—Her hands were already down at her side before and when they were held. They were not at her head.



ANGUS RAE, having been duly sworn, deposed as follows, the witness having first stated that he believed in God and that he believed that he would be punished if he did not tell the truth :

To Mr. MCKERCHAR :

Q.—What is your name? A.—Angus.

Q.—Have you any other name? A.—Man-awa-pait.

Q.—Do you go by any other name? A.—I have another yet, another Indian name.

Q.—Have you another English name? A.—Rae.

Q.—You are an Indian? A.—I am.

Q.—To what tribe do you belong? A.—The Sucker band.

Q.—Where do you live? A.—Little Trout Lake.

Q.—Where is Little Trout Lake? How far is it from Sandy Lake?

A.—There is a portage between Sandy Lake and Little Trout Lake.

Q.—How long a portage? A.—I do not know.

Q.—In what direction from Sandy Lake? A.—Right south from Sandy Lake.

Q.—Do you know the prisoner? A.—Yes.

Q.—To what band does the prisoner belong? A.—The Sucker band.

Q.—Do you know Thomas Fiddler? A.—Yes.

Q.—Did you know Thomas Fiddler's wife? A.—Yes.

Q.—What was her name? A.—Wa-saka-pee-quay.

Q.—When did you last see her? A.—Last summer.

Q.—This summer just gone by or the earlier summer? A.—The summer before this.

Q.—At what time during that summer was it that you saw her last?

A.—About the middle of the summer.

Q.—Do you know of the division of time into months and years?

A.—No.

Q.—Was it during the warmest part of the summer or was it when it was getting cool? A.—It was not in the hottest part of the summer; it was a little cool.

Q.—Was it after the hottest weather had gone by or before it came?

A.—After the hottest of the summer had gone.

Q.—Do you remember seeing Mr. Kirkness down at Sandy Lake?

A.—No, I do not remember.

Q.—Where was Mrs. Thomas Fiddler at the time you last saw her?

A.—Sandy Lake.

Q.—Where was she at Sandy Lake? A.—Pretty near this end of Sandy Lake.

Q.—How far from the Hudson's Bay Company's store? A.—I do not know the distance, but it is farther than from here to the Methodist mission.

Q.—To what tribe did she belong? A.—Sucker tribe.

Q.—Was she in camp with the Sucker tribe when you saw her last?

A.—I was away at the time she was brought there.

Q.—Where was she when you saw her? A.—When I saw her she was outside rolling round on the ground.

Q.—Was any one with her when you saw her there? A.—The mother of this woman was there and the mother-in-law.

Q.—Any one else? A.—Some women; I do not know how many.

Q.—Were there any men? A.—No.

Q.—What was the mother or the mother-in-law doing when you came there? A.—Holding her down.

Q.—Was there any one else holding her down besides the mother and the mother-in-law? A.—Nobody else but those two.

Q.—Why were they holding her down? A.—Because she was rolling around.

Q.—Do you know the cause of her rolling around? A.—I do not know what it is called. I do not know the cause. I left the wigwam.

Q.—Do you know whether she was sick or not? A.—Yes, she was sick.

Q.—Was she talking? A.—No, she was not talking.

Q.—Was she making any sound or noise? A.—Sometimes she made a noise like this: (Witness makes a noise like a woman moaning).

Q.—Did she say anything during the time that you were there? A.—I was not there long. I only just walked past where the woman was.

Q.—When you were passing, did you hear her at all? A.—I only heard her making that noise when I passed her.

Q.—When did you next see her? A.—I went out after supper; it was getting dark then.

Q.—What time of day was it when you passed her lying on the ground? A.—A little before sundown.

Q.—How long were you in the wigwam before you went out again? A.—It was a little after dark. The day sky was right overhead before.

Q.—Can you give any better idea as to the length of time that you were in the wigwam? A.—No, I could not give any idea as to how long I was in the wigwam.

Q.—Where did you come from to the camp that afternoon? A.—I came from the Hudson's Bay Company's post.

Q.—When did you go down to the post? A.—I started a little after sunrise to go to the Hudson's Bay Company's post to get some firewood.

Q.—Was this woman in the camp when you left in the morning to go to the post? A.—This woman was in there when I started and while I was away.

Q.—Who were out there besides the woman when you went out there after supper? A.—Jack Fiddler was holding her down.

Q.—Was any one else there? A.—There were some women there.

Q.—Do you know any of the women? A.—The mother and the mother-in-law.

Q.—Any others? A.—There were some others, but not near her.

Q.—Was the prisoner there? A.—He was a little to one side.

Q.—Had you seen the prisoner before this, after arriving home at the camp? A.—Yes, I saw him.

Q.—Where was he when you saw him? A.—He was in the wigwam when I came back from the Hudson's Bay Company's post. He was there during the night.

Q.—Were you in the wigwam during the night? A.—Yes. They were making a kind of shelter for the sick woman during the night, for the night.

Q.—Did you stay up during the night or did you go to sleep in the wigwam? A.—I went to sleep in the wigwam during that night.

Q.—Was there anything said by the prisoner about this woman's sickness? A.—No, I did not hear any one talking about it.

Q.—Did you hear them or any of them talking about her being sick?  
A.—I heard some one say that the woman would not live. I heard the husband say it.

Q.—Any one else? A.—Nobody else.

Q.—Did the husband or any one else say what would have to be done with the woman because she would not live? A.—No.

Q.—Did any one else but her husband say that she would not get better? A.—Nothing more was said.

Q.—Not by anybody in the camp? A.—No.

Q.—How long did you remain out there when you went out that night? A.—I was out there a good while before going into the wigwam.

Q.—What was done with the woman during the time that you were there? A.—When I came back the woman was lying on the ground, rolling. Nothing was done with her. No one was holding her.

Q.—Did she speak during that time? A.—No.

Q.—Did she make any noise? A.—Yes, she was making a noise, moaning.

Q.—After returning to the wigwam for the night, when did you see her again? A.—The next morning, when I was going to work I saw her as I walked past.

Q.—Was she then rolling about, as she had been the night before?  
A.—She was rolling and holding her arms up.

Q.—Was any one holding her down? A.—No, nobody was holding her down, but one was beside her.

Q.—Who? A.—Thomas Fiddler's aunt.

Q.—Were any other members of the band around at the time? A.—Some were sitting around.

Q.—Was there anything said by any of those sitting around in your hearing that morning regarding this sick woman? A.—The people that were there told me that the woman had never been quiet yet.

Q.—Was there anything further said? A.—No, nothing was said.

Q.—Did any one say anything as to what should be done with her?  
A.—I did not hear then. I started to work.

Q.—What time was it that you started to work? A.—The sun was a little up.

Q.—Did you hear any talk in the wigwam during the night with reference to this woman? A.—No, I was sleeping.

Q.—When did you return that day to the camp? A.—The sun was a little up when I returned.

Q.—Did you see the woman then? A.—No, I did not see her right then.

Q.—When did you see her next? A.—After supper that same day and it was getting dark then.

Q.—Where was she when you saw her then? A.—She was taken away from the wigwam towards the south.

Q.—Did you see her taken away from the wigwam towards the south? A.—No, I did not see them.

Q.—How did you know where she was? A.—Somebody told me that the woman was taken over there.

Q.—Who told you that? A.—My wife.

Q.—Did your wife tell you why she was taken over there? A.—No, she did not.



Q.—After you returned to the camp that night and before your wife told you where this woman was, did any one speak to you with reference to her? A.—No, my wife told me as soon as I got into the wigwam.

Q.—After your wife told you this and before you went over to see the woman where she was, did any one speak to you about it? A.—No.

Q.—Did they speak amongst themselves about it and not to you? A.—No.

Q.—Was there anything at all said that you heard? A.—No. I heard somebody in the wigwam saying that the woman would not live. Nothing else was said at that time.

Q.—How far from the camp was the wigwam when you saw her that night after supper? A.—About the length of the house, the Norway House council chamber, may be a little further.

Q.—Could you see her from the wigwam? A.—You could not see her from the wigwam because there were some bush and willows.

Q.—How did you know where to go? How did you find your way there? A.—It was getting dark and I saw the camp fire burning.

Q.—Where was the camp fire? A.—The camp fire was alongside the woman.

Q.—And you went out to where the camp fire was? A.—Yes.

Q.—Did you know why this woman was taken out to where this camp fire was? A.—No.

Q.—Did your wife tell you why she had been taken out there? A.—No, she did not tell me.

Q.—Did you hear any one say or give a reason for her having been taken out there? A.—No.

Q.—Were the people in the wigwam talking at all while you were in there? A.—No, they were talking in their own end.

Q.—Were they talking about this woman? A.—They were talking, but not about this woman.

Q.—When you went out there where was the woman? A.—When we went over there she was lying by the camp fire. The prisoner was there and Jack.

Q.—Any one else? A.—Norman and John Rae.

Q.—Were any of them talking when you got out there? A.—They were talking. Joseph and Jack had a string in their hands.

Q.—What did they say? A.—They were saying that they were going to strangle her and put her out of her misery.

Q.—Who said that? A.—Jack said it.

Q.—Who was Jack talking to when he said this? A.—He was talking to his brother the prisoner and to John Rae.

Q.—Did the prisoner say anything? A.—The prisoner says: It's all right.

Q.—Did John Fiddler, the chief, say anything else beyond that they were going to strangle her to put her out of her misery? A.—No, he did not say anything else.

Q.—Nothing else while you were there? A.—No, I did not hear him.

Q.—Did the prisoner say anything except that it was all right to put her out of her misery? A.—He said, It's all right. That is all he said.

Q.—Did you object to their putting her to death? A.—No.

Q.—Did you say anything? A.—I did not say anything. They were all older than I was and I did not say anything.

Q.—Would you be punished if you objected to anything that the chief suggested? A.—I do not know. They might.

Q.—Is a member of the band bound to obey the chief, bound to do what the chief says? A.—Yes.

Q.—Is a member of the band bound to do what the chief says? A.—Yes. If the chief tells me to do a thing I must do it.

Q.—What would happen to you if you did not do what the chief told you? A.—Something would happen to me.

Q.—Of what nature, of what kind? A.—I do not know what would happen. Something would happen, anyway.

COMMISSIONER: Q.—Good or bad? A.—Bad.

Mr. MCKERCHAR: Q.—From what source? A.—I do not know what would happen. Something would be wrong.

Q.—Would it be bad medicine? A.—I would be punished in some way, but I do not know how.

Q.—By whom? A.—I do not know by whom, but I would be punished, however, some way.

Q.—Did either John Rae or Norman Rae make any objection to the putting of this woman to death? A.—No, nobody made objection.

Q.—Was there any one else present excepting the four? A.—No, there were five of us; the prisoner and Jack and the other three I have named.

Q.—Was the woman lying quiet on the ground by the camp fire? A.—She was not quiet. She was lying on her back and rolling her head about and moving her hands.

Q.—Did she say anything? A.—No, nothing; but she moaned sometimes.

Q.—Did she hear the chief say that she would have to be put to death? A.—I heard the chief say it.

Q.—Did she hear it? A.—She must have heard him, but I do not think that she understood.

Q.—Did she say anything when the chief stated that she would have to be put to death? A.—She did not. She was not able to.

Q.—Did she make any sign or motion to indicate that she heard it? A.—She was rolling about when the chief was talking like this.

Q.—What was done with her then after the chief made this statement?

(Witness explains in dumb motion by a piece of cord how the deed was committed.)

Q.—What was done after the chief had made his remark?

(Witness again shows by actions how the deed was committed.)

A.—Before they put this string on they put cotton round her neck. Jack and Joseph did.

Q.—Which one did it? A.—Jack put the cotton round.

Q.—Who put the string round? A.—Both of them, Joseph and Jack.

Q.—What did they do with the string after it was put around her neck? A.—After they had everything ready my other brother was sick in the wigwam, and I went back to the wigwam.

Q.—On which side of the woman was the prisoner at the time that they were fixing the string? A.—Both were at the woman's head fixing the string when I left them.

Q.—One on each side? A.—Both on one side.

Q.—Did either of them have hold of the string or did both of them have hold of it? A.—I could not tell very well. It was kind of dark over their heads. The camp fire was away and I could not see.

Q.—Was the woman lying still while they were putting the cotton and cord round her neck? A.—No, she was not lying quiet.

Q.—What was she doing? A.—She was moving her head. She was swinging her hands.

Q.—Did she move her hands to prevent the cotton from being put on her neck? A.—She did not try to do anything like that.

Q.—Did she attempt to do anything to prevent it? Or did she say anything. A.—No.

Q.—Did she make any noise? A.—She made the same noise she did before.

Q.—Did the chief give directions to the prisoner as to how the cotton and the cord should be put on? A.—The chief gave directions. He said: "We will put the cotton round so that the cord will not cut the flesh."

Q.—Did he say anything more? A.—Nothing more was said.

Q.—Was anything said by the prisoner? A.—Nothing was said.

Q.—Was anything done with the cord besides putting it on the neck while you were there? A.—No, there was nothing done with the cord.

Q.—Do you know why the cord was put on? A.—The two men told me they were going to strangle her.

Q.—They both told you? A.—Yes.

Q.—Were you there when she was strangled? A.—No, I was not there.

Q.—How long were you away after the cord had been adjusted and before you came back to that place again? A.—I was from there a good while. I did not come back until morning of the day after.

Q.—How was the woman when you came back the next morning? A.—I saw the body lying there, wrapped up in white cotton.

Q.—What time of the morning did you go there? A.—The sun was up, but not very high.

Q.—Did you remain there very long? A.—I was not there long.

Q.—Was there any one near the body when you went out that morning? A.—Nobody was there. Nobody was around.

Q.—Did you see the body at any time after that? A.—I did not even see the grave where the woman was buried.

Q.—Were you in the wigwam when the prisoner and the chief came back that night? A.—I was sleeping when those two came back. I do not know when they came in.

Q.—When did you next see the prisoner after you saw them put the string around the woman's neck? A.—The next morning when I got up I saw them sitting in the wigwam.

Q.—Did you hear them speaking? A.—I heard the prisoner tell Norman to go and bury the woman.

Q.—Did you hear the prisoner say anything else? A.—No, he did not say anything else.

Q.—Did the chief say anything? A.—He might have said something, but I did not hear him say anything.

Q.—Do you know why the woman was put to death? A.—My wife told me that people were saying that the woman was going to turn into a cannibal. The people in the wigwam were saying this.



Q.—Was it before or after the death that your wife told you this?  
A.—Two days after the death.

Q.—What kind of cotton was put round her neck? A.—It was white cotton.

Q.—You cannot tell what kind of particular material it was? A.—No.

Q.—What kind of cord was it? A.—A line of cord double the size of this. (Witness holds the piece of cord in his hand with which he showed to the court the tribal method of strangling.)

Q.—Did you ever see any white men before you were brought in here by the officers of the Royal Northwest Mounted Police? A.—I saw a missionary once at Sandy Lake.

Q.—Who was the missionary? A.—Mr. Lowes.

Q.—How long was the missionary there at that time? A.—I do not know how long he was there. I saw him for half a day, anyway.

Q.—Did the missionary talk to your band at that time? A.—Yes.

Q.—Did you understand what he was saying? A.—No, I did not understand.

Q.—Was it translated to the band? A.—Yes.

Q.—What was the missionary discussing? What was he talking about? A.—I do not know what the missionary was talking about. I was not well at the time.

Q.—Were you out with the band at the time or were you in the wigwam? A.—The missionary was in the house. I was in the house.

Q.—Do you know anything about the white man's laws? A.—No.

Q.—Did you ever hear anything said about the white man's laws? A.—No. The only thing we ever heard about the white man was that he sent the Indian off to hunt furs.

Q.—Have you ever seen any other white man excepting Mr. Lowes? A.—I saw Campbell last fall.

Q.—What Campbell? A.—That white man who is in charge of the Hudson's Bay post at Island Lake.

Q.—Have you seen any other white men besides Mr. Campbell and Mr. Lowes? A.—I saw another white man last summer, but I did not speak to him.

Q.—Have you ever seen this missionary Paupanakiss? A.—No, not before. I never saw him out there.

Q.—What does the Sucker band, to which you belong, do to any one who is sick and cannot be cured? A.—One time I went over to the other camp visiting and I saw a man murdered. One time, I saw there a man murdered named David. After they murdered him they burned the body.

Q.—What tribe did this? A.—The same tribe.

Q.—What members of the Sucker tribe committed the murder in that case? A.—The prisoner was there and three other men: James Meekis, Joseph Meekis and Elias Rae, my brother.

Q.—Was the chief there? A.—He was not there.

Q.—Who was put to death at that time? A.—David Meekis.

Q.—Was he a brother of these other two that you have named? A.—He was their brother.

Q.—Did you see David alive before this murder was committed? A.—Yes, I saw David alive. When I went to bed at night David Meekis was alive.

Q.—What more? A.—While I was sleeping I heard somebody yelling and I went out and saw the body being put on the fire.

Q.—Did you see these parties commit the murder? A.—No.

Q.—Was David dead before he was put into the fire? A.—David was dead before he was put into the fire.

Q.—Why was David put to death by these people? A.—I do not know why he was put to death. I was not there long enough.

Q.—Was he sick? A.—Yes.

Q.—Was he sick at night when you went to bed? A.—Yes, he was very sick.

Q.—How was he acting? A.—He was sitting up and making a big noise while he was breathing.

Q.—Was he delirious? A.—Yes, he was delirious.

Q.—Was he dangerous or was he likely to cause any harm to the people in the wigwam? A.—No, I don't think so.

Q.—Was he moving about or still? A.—He was moving.

Q.—Was he speaking? A.—Yes, he was speaking.

Q.—Could you understand what he was saying? A.—He was talking, but we could not understand him.

Q.—When was this? A.—I could not tell, but it was four or five years ago.

Q.—And where was the band located at the time? A.—A little on this side of Windy Lake.

Q.—And where is Windy Lake in relation to Sandy Lake? A.—Between Red Deer Lake and Sandy Lake.

Q.—Do you know of any other cases of sick people being put to death besides these two? A.—I saw another man fixed the same way long ago.

Q.—How old were you when this took place? A.—I was very small at that time.

Q.—In what tribe was it? A.—In the Crane tribe.

Q.—Who was put to death at that time? A.—I did not see any one put to death, but the body was burned when I saw it. I knew of it because I was told it was murder.

Q.—What was the name of the murdered man? A.—Ah-kameke-see-cowi-niew.

Q.—Where was it that you saw this body burned? A.—Pretty near the other end of Red Deer Lake and close to the Little Grand Rapids.

Q.—Had this man been sick before he had been put to death? A.—This man was very sick when somebody brought him and landed him in one side of the wigwam where I was.

Q.—Who put him to death? A.—I saw David Meekis and his brothers Lucas and Joseph Meekis and John Rae.

Q.—Were they the parties who put this man to death? A.—Yes, they were the parties. I did not see who murdered the man, but I saw the body.

Q.—You were told that these were the parties? A.—Yes.

Q.—Do you know of any other cases either among the Crane or the Sucker tribes? A.—No.

Q.—Have you heard of others? A.—Never heard of any others. It is only the Sucker band that works like this; the Cranes are all right.

Q.—To what tribe do the Meekis boys belong? A.—The Sucker tribe.

Q.—To what tribe does John Rae belong? A.—Sucker.

Q.—To what tribe did this man belong who was put to death some time long ago? A.—The Crane tribe. He was put to death by members of the Sucker tribe.

COMMISSIONER: Q.—Then you say the Crane tribe never do this?

A.—Yes.

Q.—Why does the Sucker tribe do this? A.—I do not know. I never heard why they do it.

Q.—Did you ever hear the chief give any reason for having people put to death who were sick? A.—When they are sick and so long in misery they put them out of their misery.

Q.—Did you hear the chief say that? A.—Yes.

Q.—You heard him? A.—Yes.

Q.—What chief? A.—Jack.

Q.—Give the exact words? A.—Jack said that when any one was sick like that and is so miserable they might as well put them to an end.

Mr. MCKERCHAR: Q.—Did you ever hear them giving any other reason for putting them to an end? A.—No, I never heard him give any other reason.

Q.—Did you ever hear the chief say that any one who died in a delirium turned into a cannibal? A.—Yes, that is what the chief says.

Q.—Did you hear any one else say that? A.—Yes, I have heard men talking the same way.

Q.—What men? A.—All the men talk the same way, among them my brother, John Rae.

Q.—Did you ever hear the prisoner say that? A.—Yes, I heard the prisoner say that more than once.

The COMMISSIONER: Q.—When? A.—Last summer.

Q.—Before this woman was strangled or afterwards? A.—Before she was strangled.

Mr. MCKERCHAR: Q.—You heard him say that several times? A.—Yes. (Witness then corrects himself through the interpreter and says that he only heard the prisoner say so once.)

Q.—What was it the prisoner said? A.—The prisoner said that if we do not strangle her she will turn into a cannibal.

Q.—At the time you heard the prisoner say this he was talking about this Mrs. Thomas Fiddler? A.—Yes, he was talking about Mrs. Thomas Fiddler.

The COMMISSIONER: Q.—It was on this occasion only? A.—Yes.

Q.—What did the prisoner say at that time? A.—If we don't strangle the woman she will be turned into a cannibal.

Q.—Did he say anything more at that time? A.—No.

Q.—And this was before or after she was strangled? A.—Before.

Q.—What would the result likely be if she turned into a cannibal? A.—I don't know.

Q.—Would anything happen to the band if she became a cannibal? A.—Yes.

Q.—What would likely happen? A.—She would kill people.

Q.—Would anything else happen to the band? A.—Nothing else but that.



Q.—To get back to the time of the murder in question, was the woman likely to cause any harm to the people in camp when you saw her first by reason of her delirious state? A.—I cannot tell.

Q.—Was she strong or weak? A.—She was pretty strong and two women were holding her down.

Q.—Was she strong or weak at the time you saw her at the camp fire? A.—She was pretty weak when she was at the camp fire.

Q.—At the time that they were about to strangle the woman was there any one else there? A.—No one else but these five: John and Norman Rae, the prisoner and the chief and me.

Q.—Were John and Norman Rae doing anything? A.—No.

Q.—Did you see John and Norman Rae touch the woman? A.—No.

Q.—Who decides when a man or woman is to be put to death? A.—I don't know who decides it.

Q.—Why did you go away when they were about to strangle the woman? A.—My brother was nearly dying; he was in the house.

Q.—Were you afraid? A.—The chief was going to put me out; I was afraid.

Q.—When a person dies a natural death how is he buried in your band? A.—Sometimes he is put in a coffin and buried, and sometimes he is wrapped in cotton and a blanket put on top.

Q.—Do the relatives attend and see the body buried? A.—All the band attends to see the body buried.

Q.—Did you ever know of any one turning into a cannibal? A.—No.

Q.—Were you ever told of any one turning into a cannibal? A.—No, it is an old story.

Q.—Had any other person been sick at that time in the camp? That summer? A.—A child died that time.

Q.—A natural death? A.—Yes.

Q.—Do they ever put any one to death for any other reason except for being delirious or insane? A.—No.

Q.—Would you think it wrong to do so? A.—Yes.

Q.—Do you think it is wrong to steal? A.—I know it is wrong to steal, besides Constable O'Neill told me when he was out there. I did not know it before.

Q.—Did you ever go and steal before you were told it was wrong? Did you ever go into the Hudson's Bay Company's store at Sandy Lake and steal things there? A.—I have never done that thing.

Q.—You did not do it, but did you think it was wrong to do it? A.—I knew all the things that were sent there were for people to buy and that I must not steal them.

Juryman WILKINS: Q.—Did you feel yourself bound to do things told you to do by the chief that you knew were wrong? A.—I would not do like that now.

Q.—How far does the witness live from Trout Lake? A.—I don't know.

Juryman WRIGHT: Q.—Can you remember any case where a person was punished by the chief or any person authorized by the chief for disobeying an order given by the chief? A.—I don't know.

Q.—Do they have to obtain the consent of the chief to put a person to death for delirium, or can they do it without his knowledge? A.—I am not quite sure. It may be the chief's order to put that person to death.

Mr. McKERCHAR: Was any one sick either before or immediately after this woman was sick? A.—Another daughter of the prisoner died after the woman was killed; a grown-up woman.

Q.—Was she also delirious? A.—They were travelling with her in the canoe. She died in the canoe.

Q.—Were any others sick just about that time? A.—Another man was sick at that time.

Q.—Delirious? A.—Yes.

Q.—Was this child who died delirious? A.—No.

Q.—Was any one else sick? A.—No, there was no one else sick.

The COMMISSIONER: Q.—What did they do to the delirious man? A.—The man was brought to the wigwam of the Sucker tribe and the wife of this man was telling Jack to strangle the fellow. This woman was trying very hard for Jack to strangle the man. This was the wife of the sick man.

The next morning I went out with my nets. And my brother came down and I came up and he told me to come up quick. They were going to strangle a man; this man. And when I came I went up and I passed the wigwam where the sick man was.

I went up right past the wigwam. I had private work in the bush and my brother came to me. I came back to the wigwam; to where the wigwam was; the small wigwam.

When I was going along with my brother I saw a piece of string coming out from the wigwam and my brother told me to pull the string and I got the string and pulled it. And only then I knew that I had strangled a man.

It was Jack who pulled on the line the other side; the other end. After we had done I went back to the wigwam. I got frightened, as I only knew then that I had done wrong. I had strangled a man.

When I came back to the wigwam I saw the body wrapped up in a blanket. All the covering of the wigwam was pulled off and the body was lying exposed.

I and my brother helped to bury the man. We buried him about four feet down. I did not make a coffin, but I put in bark. On top of the body I laid cross pieces and put bark on that again and then I threw in the body. That is all.

Q.—After you pulled the string did you go into the wigwam? A.—No.

Q.—Did you know who was pulling on the other end of the rope? A.—Chief John.

Q.—How do you know that? A.—The prisoner told me that it was Jack at the other end. The prisoner was in the wigwam.

Q.—How do you know that the prisoner was in the wigwam? A.—The prisoner told me.

Q.—Which of your brothers told you to pull the string? A.—John Rae.

Q.—Did he tell you what you were to pull on the string for? A.—No, he did not tell me right then, but my brother told me down on the bank to come up and help to strangle a man.

Q.—Did you not know when you were pulling on the rope? A.—No, but I knew after.

Q.—What was the rope like? A.—Cod line.

Q.—What was the wigwam made of? A.—Birch bark.

Q.—Could you see inside? A.—No.

Q.—Could you hear any noise inside? A.—No.

Q.—No sound of any sort? A.—I heard the prisoner in there; talking.

Q.—To whom? A.—To his brother, the chief.

Q.—What did he say to his brother? A.—I did not understand; they were talking; that is all.

Q.—Were they not talking in your language? A.—Yes.

Q.—Then why did you not understand? A.—They were speaking very low.

Q.—How long after the woman was strangled did this take place? How many days? Ten days? A.—More than that.

Q.—Twenty days? A.—About that.

Q.—The summer was getting towards the end? A.—Yes.

Q.—Why, when you were asked before, did you not tell us about this other man being killed in this way? A.—I was leaving this till the last because they were Crane tribes.

Q.—Whom? A.—That man.

Q.—What was the name of that man? A.—It was Me-new-as-cum.

Q.—Had he any English or nick-name? A.—Yes, nick-name.

Q.—What was his nick-name? A.—It was Pe-wa-bic

Q.—And what was the wife's name? A.—I don't know.

Q.—To what tribe did they belong? A.—Crane.

Q.—His wife belonged to the Crane tribe also? A.—Yes.

Q.—Who brought him to the Suckers? A.—His wife.

Q.—What did she bring him there for? A.—I do not know.

Q.—Did you hear his wife urging that he be strangled? A.—Yes.

Q.—Who was she talking to? A.—She was talking to Jack Fiddler. She was talking to him all night and part of the next day.

Q.—Did you hear them talking together? A.—Sometimes during the night I heard them talking when I woke up.

Q.—Were there any others present besides Jack and Joseph? A.—I am sure that Jack, Joseph and my brothers were there.

Q.—Any others there when the man was strangled? Where was your brother Norman? A.—No. Norman was away down to Island Lake.

Q.—Have there been any other delirious men killed since then? A.—Not since that time.

The Reverend EDWARD PAUPANAKISS, having been duly sworn, deposed as follows:

To Mr. MCKERCHAR:

Q.—What is your profession, Mr. Paupanakiss? A.—Indian missionary of the Methodist denomination.

Q.—You are a full-blooded Indian yourself? A.—Yes.

Q.—For how long have you been a missionary? A.—For eighteen years since I was ordained. Before that I was a local preacher for eight years.

Q.—Where were you born? A.—Here at Norway House.

Q.—To what division of the Indian tribes do you belong? A.—I belong to this tribe at Norway House, the Swampy Crees, and I have spent the whole of my life in this district.

Q.—Have you ever been in the Sandy Lake district? A.—Never, but I have been as far as Island Lake.



Q.—Did you ever meet the Sucker tribe to whom the prisoner belongs?  
A.—Whenever I could I met them at the post at Island Lake. I go there twice a year for seven years.

Q.—Have you ever met the prisoner there? A.—I never knew him to meet him.

Q.—Did you ever meet the chief, Jack Fiddler? A.—Yes, I met him.

Q.—Did you often meet him? A.—Three times I met him there.

Q.—Did you ever speak to the tribe when you were there? A.—Every chance I had. During the time they were there, they were calling for their summer outfit, we had service in the morning and the evening. The longest they will stay there is four days and the shortest time they will stay there is two days.

Q.—Did you meet them on each visit during these seven years? A.—I could never meet them only just when I went to Island Lake. I saw this tribe twice every summer for seven years, fourteen times altogether, and I used to hold service with them each time.

Q.—Did you speak to them in your native language? A.—I tried to talk to them in their own.

Q.—You understand their language? A.—A little. I used to ask them if they understood mine and they told me that they easily understood me. On each occasion I preached to them on religion. I told them it was not right to steal; that it was against the law; anything which the Book forbade, which the Bible forbade, was not right..

Q.—Did any of them ever express their beliefs? A.—The old chief, Jack, with whom I had a long talk at Island Lake, stated that they believed their dreams.

Q.—What other beliefs did he express to you? A.—That that was their religion; their dreams are their religion.

Q.—Did he speak to you in any way about their treatment of the sick? A.—Never, never.

Q.—Did he speak to you about delirious people turning into cannibals if they abide in their delirium? A.—I don't believe that they ever told me anything about it. I remember it from very, very long ago.

Q.—Have you any knowledge of their belief along that line gathered from members of that band? A.—No.

Q.—Where did you acquire that knowledge, from that band or from your general knowledge? A.—From when I was a boy I heard our own people; from our own people in our own band; not from members of the Sucker tribe.

Q.—What else took place at that conversation with Jack Fiddler, excepting the long conversation on dreams? A.—That is all he said. That anything they dreamed was right for them; and that by virtue of their dreams and singing and conjuring in the tent that they would see meat, moose and deer. Jack Fiddler told me this. That is all that he told me.

Q.—That is the effect of all his talk at that time? A.—Yes, and that is the only time I talked.

The COMMISSIONER: Q.—Did you combat his belief? A.—Yes, I told him that it was not true at all.

Q.—And what reply did he make? A.—He said nothing at all.

Q.—Did you tell them that it was wrong to put any human being to death? A.—I did all that I could to make them understand.

Q.—Did you ever tell them that it was wrong to take human life?  
A.—I do not remember that.

Q.—Did you tell that to the band at Island Lake when you were talking to them? A.—I do not remember.

Q.—Did you ever know of these tragedies which we have heard of this afternoon? A.—No.

Q.—When did you first hear of it? A.—When I was down at Nelson House. It would be about 1877.

Q.—When did you first hear of the Sucker tribe doing this? A.—This summer, this case we are discussing to-day.

Juryman CHRISTIAN : Q.—Have you ever heard of them using poisonous medicines? A.—No one that I ever heard of. I have heard of it all over. But when I go there they never mention it.

Mr. MCKERCHAR : Q.—When were you last at Island Lake? A.—In 1896.

The COMMISSIONER : Q.—You have not been to Island Lake for eleven years? A.—No.

It being six o'clock in the evening, the court adjourned for dinner, to resume the hearing of the case at seven o'clock the same evening, when the case was proceeded with, the case for the Crown being closed.

The COMMISSIONER : Do you understand that you have the right now to give evidence on your own behalf on oath to the court and jury?

PRISONER : A.—I would prefer not to give evidence myself, but I would like someone to speak for me.

The COMMISSIONER : You have that privilege.

His Worship instructs Mr. Calverley that he may address the jury on behalf of the prisoner, which the Indian Agent does on counsel rising to address the panel.

Mr. MCKERCHAR : I move that the indictment be amended by inserting in the first line thereof after the words "an Indian," the words "and known among the Indians as Pesequan."

In accordance with this motion His Worship amends the indictment accordingly.

#### JUDGE'S CHARGE.

Mr. COMMISSIONER PERRY : Gentlemen of the jury, I am sure you realize with me the seriousness and importance of the positions we respectively occupy : you to decide upon the facts, and I to explain the facts and the law as they seem to me.

Counsel for the Crown has been hampered in his dealing with this case because of his desire to treat the accused fairly. The Crown Counsel, while performing his duty to the public, has endeavored to represent the prisoner's side, and you are able to judge how far he has succeeded in carrying out these duties.

Mr. Calverley has told you in a very eloquent manner of the condition of the Red man and of his superstitions and fears. Before dealing with that I would like to point out what you have to consider in arriving at a verdict.

The accused, Joseph Fiddler, or Pesequan, is charged with having killed Mrs. Thomas Fiddler, an Indian woman, on or about the first day of September, 1906, at or near Sandy Lake, in the Northwest Territories.

As Mr. McKerchar has explained, murder is the intentional killing or taking of a human life. You have to consider the facts brought out. You have to find out whether the accused intended to kill the woman.

What are the facts? The Indian is unable to fix an exact date. He has no knowledge of the day of the year or the month. However, the evidence shows that the summer before last, the summer of 1906, Mrs. Thomas Fiddler was brought to a wigwam in the vicinity of the Hudson's Bay Company's post, near Sandy Lake. Two witnesses, Angus and Norman Rae, give conversations of all that occurred.

Norman's evidence covers from the time that she arrived until the time that she was buried; Angus' from the time she arrived; and he leaves her in the hands of Joseph and Jack Fiddler. The evidence of these two witnesses do not disagree when they refer to the same period.

It is true that Mrs. Fiddler was very ill and was delirious. The Indians thought it necessary for their protection to confine her. She was held down by her mother and her mother-in-law with some of the other members of the band present looking on.

That evening a shelter was erected to cover her. Norman saw her under this shelter in the morning. She had disappeared in the evening. His wife told him she was at a camp fire a distance away about the length of this building we are in.

She was lying there on a cotton sheet. There were present the prisoner Joseph Fiddler, Chief Jack Fiddler, Norman Rae's brother John Rae, and himself. Almost immediately on his arrival the chief said: "We must strangle this woman; she is delirious and will not recover and will become a cannibal if we do not." The prisoner said: "All right."

They requested Norman Rae and John Rae to hold the arms of the deceased while they carried out their intention. Norman described in his graphic way how the arms of the deceased were seized and held by her side; how the chief and the accused stood on either side and wrapped her neck with a cotton cloth and put around the string and pulled on it and choked the woman until she died.

In corroboration of Norman we have Angus Rae. He says that he saw her; that she was delirious; how that the next day he went early to work, and how that on his return from work in the evening he was told that she was down at the camp fire.

He went there and found Joseph and Jack there. They declared their intention of choking the woman. He immediately left. This is a corroboration of what Norman Rae stated.

If you believe this evidence, Mrs. Thomas Fiddler came to her death through the hands of the accused. The law says that is murder. It devolves upon the accused to explain it either by justification or in some way to reduce the crime to justifiable homicide or manslaughter. With that in view a large amount of evidence was brought out this afternoon. The question is as to whether the accused was responsible for the act. To my mind the evidence is not clear as to the customs of the Sucker tribe.

The missionary, the Rev. Edward Paupanakiss, was unable to give us any evidence other than what had been told him by Chief Jack, but he said nothing about the treatment of the insane and the hopelessly sick. He discussed dreams and conjuring, but not all the beliefs of the Sucker Indian, not the actual belief of Joseph the prisoner and Jack. We have nothing whatever to show the belief of the prisoner.



The only thing we have is the evidence of Angus Rae, in which he says that the accused told him that if the woman was not killed she would become a cannibal and therefore a menace to the band.

If you believe that you will have to accept it all. You will then believe that this accused man was in the belief that if this delirious woman was not put out of her misery she would become a menace to the tribe by becoming a cannibal.

Does that pagan belief justify murder? You have to answer that. You cannot find anything but that Joseph Fiddler killed this woman.

Was he justified in killing her because she might have turned into a cannibal? This might be urged as a defence. The tribe was ignorant of the law of the land.

We questioned both the Indian witnesses as to that, and the impression left on my mind is that they do know what the law forbids.

When I asked Norman Rae would he steal or would he kill a white man, he said, no, it was wrong. Angus Rae also expressed that. In an ordinary case they knew that it would be against the law to steal or to kill. In any event ignorance of the law is no excuse.

It has been stated that that is a matter for the Executive; it is for the Executive to consider the question of clemency; that is a matter for the exercise of the prerogative of the Crown.

As to the question of pagan belief. If you find that the accused is justified in killing because of his pagan belief, where will it land us if we accept such a belief? What the law forbids no pagan belief can justify. The law says: "Thou shalt not kill." He cannot justify his act by pleading it.

However, you have a perfect right in spite of what I say, if you think that pagan belief would justify him, to say so, but consider first what the result would be. For as to his ignorance of the law that is a matter for Executive clemency.

Before committing this case to you, I wish to say that you can give any one of these three verdicts: Guilty, not guilty, or guilty of manslaughter.

I will now ask you to retire and to consider the verdict which you shall give.

Jury return and request a definition of the term, Guilty of manslaughter.

The COMMISSIONER: I shall read you the law on the subject from section 229 of the Criminal Code (1892), section 258 in the edition of 1896 as laid down here. The killing of a person is homicide. Homicide is culpable homicide and not culpable; a culpable homicide may be turned to manslaughter if done in the heat of passion. (His Worship reads the section in question.) That deals with the reduction of culpable homicide to manslaughter. Provocation is hard to show in the heat of passion.

The old definition was different between murder and manslaughter. Murder was killing with malice aforethought. Manslaughter was killing without malice aforethought.

It is a question of intent. Did the person intend to kill? If it is reduced to manslaughter—the person intend to kill on account of some provocation which deprived him temporarily of self-control?

Juryman WRIGHT: What would it be if death were caused in self-defence?

COMMISSIONER: It would not be culpable at all if a man acted in self defence on sufficient grounds.

Juryman WRIGHT: For instance, in the protection of others?

COMMISSIONER: A man would be justified in protecting his immediate family or any one else from being killed. But the menace must be immediate. The danger must be immediate, immediate danger to himself or to some one under his protection.

Juryman WRIGHT: Did the evidence say anything about more than one wigwam?

The COMMISSIONER: There is only one wigwam referred to. I have an idea that they are all referring to the same wigwam near the Hudson's Bay Company's post near Sandy Lake.

Juryman WRIGHT: Will Your Worship read the old Criminal Code?

The Commissioner reads certain sections of the old Code defining murder and manslaughter.

The COMMISSIONER: With malice aforethought the man intended to kill; it was planned. Without malice aforethought the killing was sudden on provocation, by mischance or by carelessness. Take the case of a brakeman charged with manslaughter in a railway accident. He is properly charged with manslaughter because his neglect caused the manslaughter.

Juryman MURRAY: What is self-defence in connection with committing manslaughter?

The COMMISSIONER: The danger must be immediate and it must be an immediate and also a reasonable danger. It must be such a danger that he must act immediately, not a danger that may occur to-morrow or later.

Juryman WRIGHT: We have been restricted to guilty, not guilty, or manslaughter?

The COMMISSIONER: Yes, the jury may add any recommendation they like and any recommendation that they may add to the verdict will be transferred in the proper way to the Crown, to the Minister of Justice, who will deal with it for the Crown.

Juryman WRIGHT: Supposing we bring in or agree that the act was done in self-defence?

The COMMISSIONER: You can bring in a verdict of guilty, of murdering Mrs. Thomas Fiddler; not guilty, and a verdict of manslaughter, which reduces the charge against him from murder to manslaughter.

Foreman WILKINS: How long was the woman lying at Sandy Lake?

The COMMISSIONER: The murder took place two nights after she came there. She then seemed to be about the same, probably getting weaker. The next night, before the murder took place, she was on her back, throwing her arms about. The witness Norman Rae states that she tried to draw her arms away very slowly. He did not ask the question as to how long she had been sick before she arrived at Sandy Lake.

Juryman WRIGHT: Why did they object to taking the woman in to the wigwam where the rest of the family was?

The COMMISSIONER: There is no evidence to that effect.

Juryman WRIGHT: Was it ascertained the distance the woman was brought?

The COMMISSIONER: It was not ascertained.

Foreman WILKINS: Could we ask that question now of the witnesses?

The COMMISSIONER : No.

FOREMAN : Then the jury cannot come to any decision.

The COMMISSIONER : Kindly retire again, gentlemen, and consider your verdict.

9.20 p.m. Jury return.

Foreman WILKINS : Verdict of guilty, with a strong recommendation for mercy on account of the prisoner's ignorance and superstition.

The COMMISSIONER : I must thank you for your verdict and for the careful consideration that you have given a very difficult case, and I am bound to say that under the circumstances you have done nothing but what you have found to be your duty, and I agree with you in your verdict. I shall take great pleasure in forwarding your recommendation to the proper authorities.

Mr. MCKERCHAR : I move that the sentence of the court be pronounced.

The COMMISSIONER : Joseph Fiddler, the jury which has had you in charge has returned a verdict of guilty to the charge that is laid against you. They have strongly recommended that owing to your ignorance of the law and owing to the superstitious nature of your belief that you be mercifully dealt with. Joseph Fiddler, have you anything to say why the sentence of the court should not be passed upon you according to law? What have you to say?

The PRISONER : I did not know better. I was angry. I was in hopes I would be let off without being punished. I do not want my life to be taken away until my death comes. I wish that God had blest me. I have no wish to say any more.

The COMMISSIONER : Joseph Fiddler, an Indian, and known among the Indians as Pesequan, I have listened to your reasons as to why the sentence of the court should not be passed upon you. The law does not permit me to exhibit any mercy toward you. It is that he who commits murder shall be hanged.

It rests with the Governor-General in Council, representing the Great Father, the King, to extend toward you mercy. He alone can pardon you in this world. I can hold out to you no hope that a pardon will be extended to you.

You have been found guilty of the murder of Mrs. Thomas Fiddler by a jury of six men who have given you a fair and impartial hearing.

The evidence which has been given before the court disclosed that this is not the only case in which human beings have been done to death by yourself and other members of the Sucker band.

The law says that this must not be. The object of punishing you is not to revenge a death so much as it is to be a warning to the other members of your tribe that human life is sacred, and cannot be taken.

The sentence of the court is upon you, the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, that you be taken to the place from whence you came, namely, the Royal Northwest Mounted Police guard-room at Norway House, in the Northwest Territories, and that you be taken from thence on Tuesday, the seventh day of January next ensuing the date hereof, between the hour of six o'clock in the forenoon and twelve of the clock of that day, to the place of execution there, and that you be then hanged by the neck until you are dead; and may God Almighty have mercy on your soul.



## FORM OF CHARGE.

Canada :  
Northwest Territories.

His Majesty the King against Joseph Fiddler.

Joseph Fiddler, an Indian, and known among the Indians as Pesequan, now in custody at Norway House, in the said Territories, is charged by Daniel Willis McKerchar for that he, the said Joseph Fiddler, on or about the first day of September, 1906, at or near Sandy Lake, in the said Territories, did kill and murder one Mrs. Thomas Fiddler, an Indian woman.

Dated at Norway House, in the said Northwest Territories, this 7th day of October, 1907.

D. W. MCKERCHAR,  
*for the Attorney-General of Canada.*

The above indictment is amended on motion of Mr. McKerchar for the Attorney-General by inserting in the first line after the words "an Indian," the words "and known among the Indians as Pesequan," this 7th Oct., '07.

A. BOWEN PERRY,  
*Commissioner.*

Canada :  
Northwest Territories.

To the Sheriff of the Northwest Territories, and to all Constables and other Peace Officers of the said Territories, and to the Royal Northwest Mounted Police Force :

Whereas Joseph Fidler, an Indian, and known among the Indians as Pesequan, was, on the seventh day of October, 1907, at a court holden at Norway House, in the said Territories, before Aylesworth Bowen Perry, Esquire, Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, power and authority of a Stipendiary Magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Amendment Act, 1907, with the intervention of a jury of six, convicted, for that he the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, at or near Sandy Lake, in the said Territories, on or about the first day of September, in the year of our Lord 1906, did kill and murder one Mrs. Thomas Fiddler, an Indian woman.

Whereupon it was adjudged by the said court that the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, be taken to the place from whence he came, namely, the Royal Northwest Mounted Police guard-room at Norway House, in the said Territories, and that he be taken from thence on Tuesday, the seventh day of January next ensuing the date hereof, between the hour of six o'clock in the morning and twelve of the clock of that day, to the place of execution there, and that he be hanged by the neck until he is dead.

These are therefore, in His Majesty's name, to command you, the said Sheriff, Constables and Peace Officers, and Royal Northwest Mounted Police Force, in your several and respective parts, to execute and carry into effect the sentence and judgment of the said court in the manner

required by law within the walls of the prison in which the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, may be confined at the time of such execution.

Given under my hand and seal at Norway House, in the said Territories, this eighth day of October, in the year of our Lord one thousand nine hundred and seven.

A. BOWEN PERRY,

*Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, powers and authority of a Stipendiary Magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Amendment Act, 1907.*

I hereby certify that the foregoing evidence is a true and correct transcription of the shorthand notes of the evidence taken at the trial of His Majesty the King against Joseph Fiddler, taken by me in the Council Chamber at Norway House, in the Northwest Territories of Canada, on the seventh day of October, 1907.

H. FERGUSON,  
*Reporter.*

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The foregoing notes on the killing of Wa-sak-apee-quay were kindly supplied at my request from Commissioner A. Bowen Perry, by direction of Frank Pedley, Esq., Deputy Minister of the Interior, Ottawa. To both gentlemen our best thanks are due. The evidence is extremely interesting, illustrating as it does some peculiar methods of Indian thought in a way that is more striking, because more natural, than in a direct form. Some of the iteration might have been avoided, but on the whole it was thought better to give the evidence *in extenso*. D. B.

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It may startle many to learn that within the limits of the United Kingdom a deed, in not a few respects even more savage and in every way as cruel and unfeeling, happened not very many years ago—in 1905, purely as a result of gross superstition, of superstition fully as degrading as that which influenced the poor Crees of our North-West. The victim “was a handsome young woman, 26 years of age, who had been married for some years and had no children.” When the doctor called to see her, “he found her suffering from nervous excitement and a slight bronchitis,” but he said he “could see nothing likely to cause death,” and he gave her some medicine.

The people, however (all her own relatives) knew exactly what was the matter—the poor woman was “onder a spell”—she was bewitched, or “had a witch in her,” and it was therefore the duty of those persons to exorcise the being in possession, that “Richard might be himself again,” or, as in this case, that Bridget might be.

To effect this her husband called for some offensive liquid to throw on her, which was done “several times,” while her first cousins were “holding her down on the bed.” . . . The men at each side of the

bed kept her body swinging about the whole time, and shouting "Away with you. Come back (calling her by name) in the name of God!"

The witnesses who thus testified at the trial stated that they understood from this that the woman "was a witch" or "had a witch in her, whom they endeavored to hunt out of the house by torturing her body." The writer of the book supplying the information respecting this sad case says, "Some time afterwards she was lifted out of the bed by the men, or rather demons, and *carried* to the kitchen fire, and one said they had to use the poker on her to make her take the medicine." Four men held the woman in her night-dress over the fire, "her body resting on the bars of the grate, where the fire was burning." Her husband told her to answer to him three times, telling her name and his name. She did so, and the witness informed the court that all present "showed a feverish anxiety to get her answers before twelve o'clock." "After she had answered the questions, they put her back into bed."

When her husband was asked whether he was giving her the medicine ordered by the doctor, he said he "*had no faith in it,*" and that "*people may have some remedy of their own that could do more good than doctor's medicine.*"

During the night she left her bed, and dressing partly, went to the kitchen fire, where a number of visitors sat telling witch and fairy stories. At last one of the women made tea, and offered the sick victim a cup, but her husband jumped up and insisted that before drinking the tea she should eat three bits of bread and jam (evidently a survival of the ancient "ordeal by bread") being ordered to say as she accepted each bit, "I am (so-and-so) in the name of the Father, Son, and Holy Ghost!" On taking the third piece she failed to utter these words, when he threw her down, "put his knee on her chest, and one hand, forcing the bit of bread and jam down her throat" because "he suspected (still) that it was a fairy and not his wife."

Among other performances a lighted stick was held near her mouth, lamp-oil was thrown over her and she was set on fire, the husband insisting that it was not she he was burning, and he added, "you will soon see her go up the chimney."

By this time the poor woman was dead—as dead as Wa-sak-apee, the Cree woman!

The only object there is in quoting the last story, even in brief form, is simply to show the parallelism which so often exists between savagery and civilization, and if ethnological studies have any use at all, they should serve to warn us off primitive shoals, even although they may not clearly indicate good anchorage elsewhere. In many ways we yet have to combat with old time proclivities, and surely the murder of the young woman in 1905 illustrates one phase of persistence of early culture, even of a time comparatively recent when we were taught that we should "not allow a witch to live."

One might suppose that in both cases mentioned here, natural affection would have overcome all other feelings, but the influence of folklore and tradition were too strong and proved paramount.

It is also worthy of notice that at the trial of this Indian the proceedings were conducted with quite as much dignity as if white people alone had been concerned.

D. B.











